

SOUTHERN TEXTILE BULLETIN

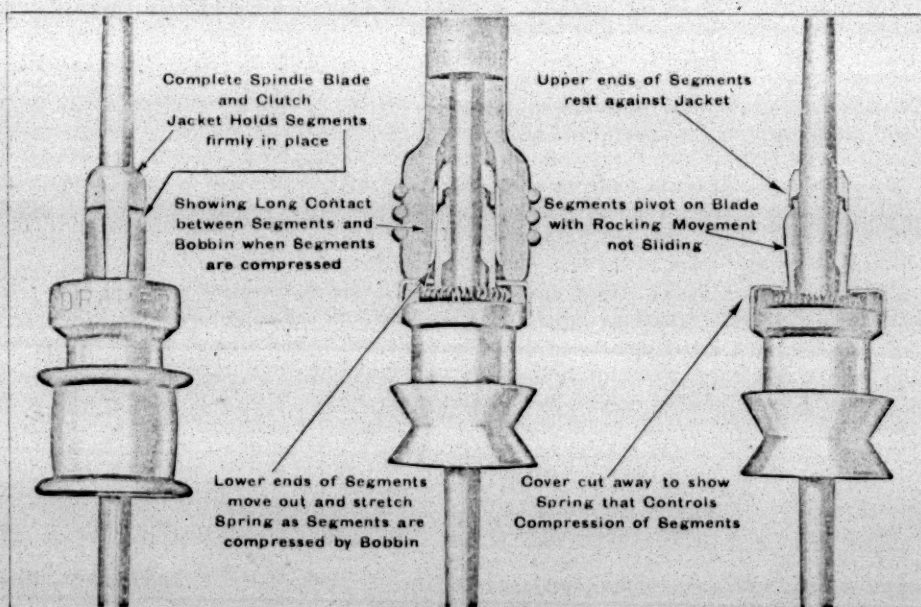
VOL. 39

CHARLOTTE, N. C., JANUARY 15, 1931

No. 20

The Stimpson Centrifugal Clutch Spindle

Will Wear as long as any Solid Whorl Spindle



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Dyers, Bleachers, Finishers and Mercerizers Meet in Charlotte

The winter meeting of the Dyers, Bleachers, Finishers and Mercerizers Division of the Southern Textile Association, held last Saturday in Charlotte, lived up to the high standards set by previous meetings of this group. The attendance was large and the program proved unusually interesting and instructive. The technical session developed much information of real value to the members and the entertainment features were fully up to expectations.

TECHNICAL SESSION

The meeting opened with a luncheon at 1 p. m., at the Charlotte Hotel. Four technical papers were ready immediately after the luncheon. The members, in accordance with the usual custom, then divided in groups for a round table discussion of the various processes in which the membership is interested.

At 7 p. m. members and guests attended a banquet at the Charlotte Hotel. The program featured several addresses by prominent speakers and numerous dancing, singing and humorous numbers, concluding with an "Amos and Andy" broadcast over loud speakers installed for the occasion.

The papers presented at the technical session are given herewith:

Water Softening BY S. F. ALLING

Sales Manager, Hungerford & Terry, Inc.

Many cotton manufacturers present at this meeting remember a very prevalent belief that bleaching and dyeing could not be successfully conducted in the South on account of the water. Efficient filter plants have demonstrated the fallacy of this belief and have shown that Southern waters are second to none when properly filtered.

In company with New England the South is now engaged in dispelling another fallacy that the unsoftened waters of New England and the South ranging from two to four degrees of hardness require no further treatment than filtration to render them perfectly satisfactory for dyeing, bleaching, finishing and other textile processes. The rapid increase in the number of water softener installations in Southern mills in the last four or five years is in itself proof that decided advantages can be gained by the installation of water softeners.

Water softening has been a progressive requirement. Twenty years ago water softeners were seldom installed for waters of less than eight degrees of hardness. With the then known processes a softener that could deliver a water averaging four degrees of hardness was considered a reasonably efficient apparatus. In exceptional cases three and one-half degrees of hardness were obtained. These softeners were troublesome devices requiring lime and soda in the process and were generally pretty messy affairs. As a result of waters of six degrees of hardness were classed as soft, and waters below four degrees of hardness were classed as very soft. As the New England waters mainly run from two to four degrees of hardness they attracted an enormous number of industries to that locality. The waters of the Coastal Plain of the Southern States possessed about the same degree of hardness but their virtues were obscured by the enormous amount of mud they carried.

Then the zeolite softener appeared. This was a filter which instead of being filled with sand was filled with zeolite, a substance which possesses the property of extracting lime from the water and when exhausted can be regenerated with a solution of common salt, after which it is again ready for another period of lime absorption. This cycle can be extended almost indefinitely without deterioration of the power of the zeolite.

The advantages of a zeolite softener as compared with the old lime-soda softener were tremendous. In the first place the water was made 100 per cent soft, or as it was then expressed, reduced to zero degrees of hardness. No measuring of chemicals was required in this process. Fluctuations in the degree of hardness of the raw water were automatically met by this wonderful apparatus. No more chemistry than is possessed by the average man was necessary to run this softener successfully. With many waters the cost of softening with the zeolite softener was less than the lime soda process.

But there was one extremely serious drawback to the advance of water softening by this method and that was the excessive cost of the zeolite. This was originally manufactured in Germany and was at first sold at about \$2,200 per ton. Even at this figure some of it was sold but the price soon dropped to about 40 and then 20 cents per pound and this latter figure was maintained for many years. Even at this price many industries found themselves able to purchase a zeolite water softener. Competition had also stepped in and an American zeolite was

brought out which was claimed to be superior to the German article. This effected a still further reduction in price and more softeners were installed.

In the meantime it was found that certain clays and earths possessed most of the elements necessary for the manufacture of a zeolite and it was simply necessary to supply the missing elements and to bake the product to make a perfectly good zeolite. Then came the discovery that the great greensand beds of New Jersey possessed water softening properties and that this greensand was a natural zeolite. True, it had some unpleasant characteristics, one of which was that after regeneration it was quite soluble and the softened water had much the appearance of thick pea soup. This, however, was merely a problem for the chemists to solve and this was done in various ways, heat, chemical solutions and gases being some of the methods employed to make greensand a satisfactory water softening zeolite. Still again, greensand, while making water 100 per cent soft was of very low softening capacity or exchange value and part of the chemists' problem has been to raise this exchange value to a point where it could compete with the synthetic zeolite.

Success has attended the efforts to produce a satisfactory zeolite of good exchange value from the greensands.

Such zeolite as are made from the bentonite clays or from greensand are commonly referred to as natural zeolites. The name is somewhat misleading because a quite elaborate chemical treatment is necessary in their manufacture.

A great advantage of the greensand is its cheapness. It possesses other valuable properties such as great durability, ruggedness, practically non-sensitiveness to acid solutions and iron, but its distinguishing characteristic is the cheapness with which it can be manufactured. The base price today of greensand zeolite is about \$130 per ton. Comparing this with the high prices maintained so many years and considering that even at that price many water softeners were installed, it must be apparent to all that the zeolite water softener is now an article that can be installed in every plant without putting too great a burden of investment upon the purchaser.

Nor must it be assumed that because of its cheapness the greensand zeolite is inferior to any of the others. It is not the writer's intention to claim superior advantages for any zeolite but when viewed from all angles greensand is as good as the best and better than the rest. Its cheapness is merely due to the fact that nature has supplied the raw material so bountifully and so inexpensively that little is required from the head of man to complete this wonderful product.

Lest there be some who are not fairly familiar with the zeolite water softener let me state that this softener is merely a variation of the familiar water filter. It may be of the pressure or gravity type and the flow may be upward or downward through it. It differs from the familiar water filter in that zeolite sand instead of ordinary silica sand is placed in it and that it is equipped with an apparatus for regenerating which consists of a brine tank and a pump or ejector for delivering the brine to the softener for regenerating purposes.

In operation the water is passed through the softener just as through a filter. As it passes through the zeolite all of the lime and magnesia, although in solution, is completely retained in the zeolite bed and the water emerges from the softener 100 per cent soft. When the zeolite bed has retained all of the lime and magnesia it can hold operation is suspended for about half an hour while brine is forced through the zeolite bed and the by-

products of regeneration are washed out. The softener is then again primed for another run and this process can be repeated for years without the zeolite losing its exchange capacity or softening power. The cost of operation is represented by the amount of salt consumed and an allowance of half an hour for labor during each regenerating period.

Salt costs on the average of \$14 per ton, or about $\frac{1}{4}$ ¢ a pound. On this basis 1,000 gallons of water having three grains of hardness to the gallon can be made 100 per cent soft for about one cent.

It is not for the writer to tell you the benefits of soft water. You all have the keenest appreciation of the troubles that are caused by an unsoftened water supply and you know how much smoother and more satisfactorily everything would run if you had 100 per cent soft water. There is, however, a strong probability that there are economies that may be effected and processes that may be improved that have never been considered by you. It has been my experience that certain processes used which are considered part of the dyeing and bleaching process really have no place in these operations and are performed to overcome hardness of the water. They have been used so long that they occupy an honorable position in the manufacturing processes but they are really only compromises with the water. After a softener is installed the manufacturer eventually discovers that these auxiliary processes can be omitted with decided advantage both to his product and to his pocketbook. I have in mind the case of a felt manufacturer who from time immemorial had used about six thousand dollars worth of ammonia every year as a necessary part of the finishing process. Shortly after the installation of a water purification plant he discovered he could get better results by completely omitting the ammonia from his process and he was just six thousand dollars per year ahead forever afterward.

Another instance is that of a dyer dyeing silk stockings. This man was sorely beset by redyes and seconds, redyes running as high as 60 per cent at times. After the installation of a water softener both redyes and seconds were practically eliminated. In this case the reduction in redyes was to have been expected, but the great reduction in seconds came as a surprise to the manufacturer.

Another economy that is effected by the installation of a softener is in the coal pile. A zeolite softener keeps the tubes and shell of a boiler clean and free from scale. Consequently, the heat transference is always excellent and the heat from the fire goes into the water and not up the stack. Even with soft waters economies ranging from 10 to 30 per cent are often effected in the consumption of fuel by the installation of a softener.

I trust this paper has made clear to you that the standards of excellence are being steadily and radically raised and that an article which might have been classed as a first a year or two ago is today positively listed as a second. Competition is keener today than ever before and to secure business one must show a superiority either in cost or in quality, and preferably in both. Those who fail to maintain this standard do not drop into second place, they drop out of the picture. The iron law of nature has decreed that only the fittest can survive and the weak must fall before the strong. The laws of business are just as severe and the man who attempts to maintain his position with inferior equipment and inferior processes must as inevitably fall as will the weaker animal of the jungle.

The zeolite softener is now within reach of all and

within the range of every manufacturer's budget. Is it safe, when such a small outlay is involved, to attempt to compete with the properly equipped manufacturer unless equally well equipped?

Colors Other Than for Dyeing and Printing

BY CHAS. P. WALKER

A. Klipstein & Co., Charlotte, N. C.

When I was invited to read a paper on: "Colors Other Than for Dyeing and Printing," my first thought was that the subject would prove to be very limited. In my ignorance, when a dyer, I had conceived the idea that colors were only used for dyeing and printing textiles; but on looking around I found Christmas decorations consisting of colored grasses, mosses and even weeds that never grew that way; paintings, stained goods and colored lights, even the ladies I met showed evidence that colors were used "other than for dyeing and printing." I grew bewildered but thankful that, we as textile men, did not have these problems to bother us; at least not in working hours.

By keeping my mind on the fact that I was to address textile men I realized that there are many stages in the manufacture of textiles where color is used other than for dyeing and printing.

CUT MARKING

The first place where color is used in textile manufacturing is at the slashers for cut marking.

Cut marks are applied to the warp at specific intervals for the purpose of checking production, reckoning costs and figuring wages of operators. After the goods leave the weave mill, these marks serve no purpose and should not be confused with head-end, tail-end and trade marks which remain permanent throughout the bleaching and finishing processes.

The first consideration in the selection of a color for cut marking purpose is: Will it show on the woven fabric? And second: Will it mark off in subsequent operations of bleaching, dyeing or finishing of double cuts where at least one cut mark is left in at the weaving mill? Right here is considerable food for thought. On grey goods, to be subsequently bleached, it is obvious that the cut mark should wash out completely without staining any other part of the goods and, if the goods are one fibre fabrics, no difficulty should arise in a proper color selection. Insoluble pigment pastes would appear the proper thing. Acid colors in starch can and are also used.

In the case of colored fabrics containing delicate shades to be wet finished from the loom, it is conceivable that a superficial cut mark made with a removable color paste might mark off on rolls, and make repeat marks. In such cases the use of a permanent mark, such as a cellulose lacquer, is well worth considering.

HEAD-END AND TAIL-END MARKS

Head-end and tail-end marks are put in goods for the purpose of checking stretch and also, in the case of valuable goods, to ensure that original lengths are returned in full. These marks must be permanent and are either woven in at the loom or sewed in before finishing. The use of cellulose lacquer would simplify the application of these marks and thereby reduce finishing costs.

In the case of multi-fibre fabrics, the use of dyes for a distinctive color cut mark must be approached with care if the goods are to be wet finished, as such color may be transferred and actually dye one of the other fibres. Here cellulose lacquer would appear to be the best bet.

The marking of lot numbers on piece goods is another point where color might be used. Tar has been used for marking goods for bleaching for many years, and has proven satisfactory if used right and not applied too heavily. Aniline black, however, completely obliterates this kind of mark and metallic markings have to be resorted to. Again I present the thought of cellulose lacquers, with their brighter shades, as a medium for marking lot numbers.

If goods are to be finished or dyed "from the loom" tar, because of its slow drying, cannot be used as it will obviously mark off on the rolls, causing repeat marks. Crayon is often used; but the wrong kind might cause trouble. For instance, markings made with a wax crayon, when passed through the hot calender, leave an imprint on the hot roll, due to the wax melting, and repeat marks might occur. The only safe crayon for use in marking fabrics is the chalk or talc variety.

TRADE MARKS

The use of trade marks on textile fabrics may be roughly divided into two classes. Firstly: Those markings put on grey goods for export which consist of designs or names applied with ultra-marine. Theoretically, these trade marks wash off clean. Sometimes such goods have been bought on a favorable market and have been diverted to a domestic bleachery for finishing. In such cases only a pair of shears has satisfactorily removed these markings as they are usually stamped so heavily that even in a bleaching operation they cannot be removed without trouble. Secondly: Goods trade marked for merchandising purposes. Such marks must obviously either wash off easily or be permanent. Nothing in between should be considered. Otherwise the mark loses its value.

Colors used for trade marks, other than permanent, must be chosen with due thought to the fibres used in the fabrics. They should be of such a nature that they will not act as a dye on any of the constituent fibres. This particularly applies to whites or goods finished a delicate shade. Permanent trade marks that are woven into the goods do not come within the scope of this paper. We will, therefore, turn to those permanent markings which are applied after the goods are finished. They are generally applied with a stamp using various kinds of marking inks, or are applied from a transfer by means of a hot iron. Up to quite recently black was the only color that stood up under all conditions, but the demand for vari-colored trade marks has brought attention to various colors for this purpose. So far as the writer's experience has gone only the cellulose lacquers have been satisfactory, and then only when made with suspended pigments. I believe that improvement could be made if colors could be found that would actually dissolve in the lacquer vehicle as then the material would penetrate the fibre and be more permanent to abrasion.

So far, I have only spoken on the use of colors other than for dyeing and printing, where isolated portions of the fabric were treated. Let us now consider the use of the color on the fabric itself, either as a whole or over a large proportion of the goods.

COLORS FOR YARN IDENTIFICATION

It is with a great deal of timidity that I approach the subject of staining yarns for identification purposes. The increased use of acetate fibres, and the many different rayons, alongside animals and vegetable fibres, especially in the hosiery business has raised a bewildering mass of problems. Each different fibre, and in fact different counts of the same fibre, can only be identified by each being a different color. It is essential that the colors used for staining yarns must be of such a nature that

they can be completely removed without any permanent transfer of color to one of the other fibres. We need a Goldberg and his Professor Botts to solve this problem. If acid or basic color is used to stain rayon or cotton the silk and wool will permanently receive the color when it is released in the wash bath. Even the apparently simple problem of staining cotton yarn to be knit with rayon is complicated by the use of certain softeners which act as a mordant and fix colors which otherwise are easily removed with cold water. One particular example, I would mention, of this difficulty was in staining mercerized yarn for identification. Violamine had been used without complaint for quite a long time—then a complaint was registered that the color would not wash 2—Colors other than—s—

off the yarn. Investigation of the problem disclosed the fact that the manufacturer was using a softening oil evidently containing a sulphonated castor. This was acting as a mordant and the violamine, being of a similar nature to rhodamine, was acting like rhodamine and dyeing the yarn. It was only at considerable expense that the color was finally removed from the yarn and azo rubine applied in its place. This color did not become fixed on cotton under the condition that existed and was found more suitable.

Cellulose acetate fibres attract colors even when not in solution, and, therefore, suspended insoluble pigments do not always fit.

I leave it to some chemical research body to evolve colors that do not dye anything, and, in the meantime, humbly offer as a solution of this problem, the use of easily dischargeable azo colors and a preliminary stripping in a hydrosulphite bath before dyeing. This suggestion is made for cases where the yarns are sold from stock and where it is not known what other fibres will be used with them.

Of course, if all operations were predetermined it is feasible that suitable colors for staining now exists; but I do feel that there are some cases where the problem cannot be solved with existing colors for reason previously mentioned.

I invite discussion on this matter as I feel that the subject presents a vital problem.

BLUEING ON BLEACHED GOODS

Probably the most important use of color, other than for dyeing and printing of textiles, is the use of blueing on bleached goods. In the blueing operation of cotton goods it must be borne in mind that we have three major products to blue. Firstly: The fabric itself. Secondly: The sizing material. And thirdly: In the case of filled goods, the filling, which consists of talc, clay, etc. The selection of blueing for a complete job involves considerable thought. For instance, a blueing for cotton may not be suitable, from a cost standpoint, for blueing clay or talc. Due thought must also be given to acidity and alkalinity of any compounds with which the blue comes in contact.

In the finer grades of goods the fabric is first blued at the water-mangle and then a suitable blueing is mixed with a sizing paste—consideration being given the the pH condition of the materials involved.

FROM TYPES OF BLUEING

Briefly, selection of blueing is made from four types, each having characteristics favorable to different conditions.

Firstly: Ultra-marine blue. This product has been used with considerable success for a great number of years. It is not susceptible to alkalis; but is decomposed by acid. In certain bleacheries this is considered an ideal

blueing. In fact, I know of one or two bleacheries where goods are taken from the chemic pit, passed through the washers and are mangled, starched and blued. This obviously is a saving of time, material, and equipment and, during the two years that I observed this method, I found no objection to it though some of you more experienced bleachers may be able to pick holes in this method, also in the blueing material.

Secondly: Prussian blues. These blues have the great objection to being sensitive to alkalis and, inasmuch as many finishing compounds are on the alkaline side, Prussian blues do not completely fill the bill.

Thirdly: Acid blues, or violets. These are acid colors which do not dye the cotton, are completely soluble in water and, therefore, present the simplest method of blueing cotton goods. They are not, however, particularly fast to storing and light.

All the above blues present one great advantage, appreciated by the finisher, in that they can be readily removed from the goods. Sometimes the necessity arises for goods to be refinished. Here we find enough trouble without any complications with regard to blueing. For instance, ultra-marine blue can be readily removed through a sour; Prussian blue through an alkaline soap bath. The acid colors merely need to have the starch removed and the color comes with it.

VAT COLORS

The fourth, and last class, is the vat colors. These are the most important blues of any, and, if properly prepared, no difficulty should be experienced in their application. It will be well to remember, however, that the blueing with vat colors is a semi-dyeing process. Certain ingredients in the sizing tend to reduce the colors which, of course, are then absorbed by the cotton and redeveloped by exposure. Finishers, having occasion to refinish goods blued with vat colors, will run into trouble in reblueing to shade due to the color which has been fixed in the original starching and not obliterated during the desizing of the menders.

This paper, I admit, has been brief as to length; but I think you will agree with me that thorough discussion could expand its volume beyond measure, and I think that you will further agree with me that the subject: "Colors Other Than for Dyeing and Printing," even if we keep our minds in our business, is a big and very important subject.

The Finishing of Rayon and Cotton Piece Goods

BY C. L. EDDY

Brandon Corporation, Traveler's Rest, S. C.

The finishing of rayon and cotton piece goods has only developed within the past eight or ten years, and to a vast majority rayon fabrics is a big hazard, because it is of recent origin. There are no theories and books handed down from past generations from which we are able to get a great deal of information.

Probably a great many have handled what is known as wood silk or artificial silk such as woven in silk striped shirting, fifteen years ago, and in those days it was necessary to be very careful in handling this artificial silk in the wet state, because the silk would break at the least strain and could not lay in the wet state very long without becoming tender. Also great care was taken in the chemicals used in the various processes to be sure they were not too strong to injure the artificial silk.

In handling the rayon of today we find from actual

experience that we can handle it in a cotton finishing tent to a certain degree. I don't mean that all constructions of rayon can be so handled. The print cloth constructions with rayon filling known as Alpaca can be printed and dyed satisfactorily. Serges or twills for the rug trade and woven crepes with rayon filling are being finished in large volume in some of our Eastern finishing plants. As in all our work whether cotton or rayon a certain amount of judgment is necessary to carry our work on to a successful conclusion.

FINISHING RAYON MIXTURES

In finishing rayon mixtures it is very necessary to be careful of the speed of the machine which you are operating, because excessive speed is damaging to the cloth. In other words, you would not think of running a piece of rayon through a log washer at 200 yards per minute even running it through a heavy log washer at 70 yards per minute. If you did I believe you would find the filling throughout the piece broken. In holding it to the light, the piece would look as if it had been held in front of a shotgun. The same is true in handling the cloth through a wooden-roll starch mangle with a heavy pad. The best results are obtained with a brass and rubber or two-rubber bowl starch pad. The process of finishing these constructions, in a measure, are the same as for cotton. For instance, you would diastofor the same as for cotton for the same reason you diastofor cotton, but in finishing rayon will not stand the heat as well as cotton. Therefore, it is necessary to singe with a gas flame using either three burners, two on the face and one on the back. Singeing is necessary to retain the lustre in the finished goods, because the fuzz will cover up the rayon and prevent the natural lustre from showing. As in cotton finishing, it is necessary to have a good bottom to produce the proper finished result. Therefore, most fabrics should be bleached. In bleaching the writer prefers sodium hypochlorite bleach; first, because of quality of white obtained, and second, because the goods have very little handling with the danger of tendering the fabric eliminated. The speed at which the kier is loaded should be not over 100 yards per minute, as excessive speed with the goods in a wet condition will tend to fray. After singeing, the goods may be run from the kier through a squeezer containing cold water, into a scutcher and dried in the cans continuously. You will notice that you have lost quite a little of the natural lustre which is due to the excessive heat of the cans; however, this lustre will come back when the fabric is wet out again. Your goods are now in a condition to dye through a pad, jig or continuous dyeing machine either direct color or vat. All dye liquors should not register over 130 degrees, because heat does kill lustre. Rayon has a great affinity for dye-stuff, covers well, showing up very bright. If your temperature is too high you will find the rayon taking the dye a little faster than the cotton which to a small degree will give you a two tone effect.

ADDING FINISHING MATERIALS

The writer has found by experience that the finishing materials are best added to the dye bath, and a great many times no finishing starches or gum are necessary. In fact starches should not be used in rayons, as they have a tendency to cover up the lustre. A transparent gum for body is sometimes necessary using olive oil or some transparent oil to soften as the case may be.

The goods are finished then over a tenter frame or Palmer tenter depending on the finish required. In the case of a cotton tenter notice should be taken as to the amount of heat and the speed should be about 55 to 60

yards per minute. Too slow speed will bake the finish killing some of the lustre, and, of course, too much speed will not give the goods time to dry. A little moisture left in the goods will take away lustre. In no case is it advisable to finish rayon mixtures over cans in front of a tenter range.

In case the fabrics need to be broken or smooth face necessary, one or two nips on a light calender may be given. Also a rubber covered expander works very nicely in front of the calender to retain the necessary width.

We have found by experience that the best results acquired in finishing rayon mixtures are obtained with the least amount of handling, using as little heat as possible. You, no doubt, have heard some one say "I want something to develop lustre in finishing, or 'what can I do to get more lustre. It is the opinion of the writer that you cannot get more lustre than the natural lustre of rayon itself. If you will go back over your problem you will find something has happened in your process which has killed the lustre. Be sure that you have not used excessive heat, and that the right kind of transparent gum has been used, to get the hand.

VARIOUS CONSTRUCTIONS REQUIRE DIFFERENT HANDLING

It is very difficult to write and explain or give you in this paper all the different phases of finishing rayon, as the various constructions have to be handled differently, such as rayon warp goods either twill or sateen weave in which case these fabrics could not satisfactorily be put into rope form, as the tendency would be to crack the face. The heavier twills and sateens which, of course, carry more moisture should be extracted before the final finishing process. These fabrics should be bleached if necessary on the jig. Roller bearing jigs should be used on rayon to relieve the tension. In fact tension should be watched very carefully in all processes.

Rayon crepes should be dyed in the rope form wet in creels for the best results and extracted and finished in a crepe dryer.

You, no doubt, have heard a great deal about shiners in rayon filled fabrics, which to finishers have been the cause of a great deal of trouble, and in many cases the blame is shouldered on to the finisher. In the past I have personally conducted a great many tests to determine whether or not the finisher was at fault, but in no instance have I found the finisher at fault. In some cases the finishers have made them more pronounced because they had to finish them to almost grey width to get the desired finish. It has been my experience that the shiners were always in the grey goods before we attempted to handle them in the grey.

In closing, there is one thought that I wish to leave with anyone who anticipates finishing rayon and that is to handle the fabric as little as possible and leave out all strong chemicals. As in finishing rayon the principal idea is to retain your natural lustre, and to a certain extent water and machinery will give you the desired requirements.

Dyeing of Mixed Fiber Fabrics

BY E. W. PIERCE

The Ciba Company, New York

Fabrics composed of combinations of the various textile fibers may be considered as of two classes; those made up entirely of undyed fibers and those in which some of the fibers have been dyed prior to weaving or knitting. The first class involves only piece-dyeing problems but the second class includes loose stock, skein,

warp and beam dyeing as well as the piece-dyeing which follows.

The subject is a vast one and might easily occupy the attention of a textile congress for weeks, giving us at this time only the opportunity to make a general summary and classification of the best methods at present in use.

PREPARATION FOR DYEING

Regardless of the fiber combination, the first thing to be considered is the proper preparation of the goods. Before we even think of the means of cleansing the material we must determine the best mechanical means of handling them to avoid irregularities and damage. There are many classes of fabrics, particularly those made of mixed fibers, where the selvage is so woven that it is almost a foregone conclusion that the goods will curl back for several inches as soon as they are wet with the result that complete scouring or even dyeing is impossible. In such cases it is the custom to sew or bag the pieces by stitching the selvages, only removing the threads after the final rinsing. Delicate goods like hosiery are handled either in nets or in machines with compartments, which are in themselves actually metal nets. The proper precautions for the preservation of the fabrics will naturally suggest themselves to any intelligent dyer.

When we are scouring or boiling off a one-fiber material, there is a procedure which gives the best results, but as soon as we introduce another textile fiber we introduce new complication. For example a fabric of all-silk may be stripped in boiling soap and a cotton fabric will stand boiling caustic, but if the fabrics contain wool we must omit all strong alkalies and keep our temperatures around 120 deg. F. while, if the acetyl silks are present, we must not only avoid strong alkali but keep below 175 deg. F. to avoid the de-lustering and saponification of the acetyl silk. Badly shrunken and haspy wool or saponified acetyl silk will make good work impossible. In such cases silk cannot be boiled off in the usual way, but the gum is removed by making up a soap bath sharpened with ammonia and letting the goods lie in it over night at 140 deg. F. Under these conditions the wool is not shrunken or made brittle and acetyl silks are not saponified. Cotton may be wet out thoroughly by the use of the many wetting-out agents now on the market and the result is equal to a thorough boil in strong alkali. In all cases the use of soaps and soluble oils to remove all traces of grease and impurities is very important because, while it is sometimes possible to dye dirty goods it is not good practice and may give rise to trouble at any time.

The first problem of the dyer then is to cleanse the goods so that every fiber in the combination is freed of all foreign matters and so no fiber has suffered in strength, nature or luster. Today the market affords a large selection of detergent and emulsifying materials that cover the dyer's needs for every emergency.

SOLID SHADES AND MULTI-COLORS

The dyeing of mixed fiber fabrics assumes two-phases; first the production of solid shades and second the production of multi-color dyeings. In dyeing solid shades on cheap goods where fastness is not a paramount consideration, we have a large series of substantive dyes that will give, in themselves, fairly good solid shades on most of the fibers, excepting acetyl silks, but need a small amount of shading with neutral dyeing acid dyes to adjust the animal fibers to the shade of the vegetable fibers. Much depends on the fabric construction, for if the fibers have been mixed before spinning, slight differences in shade will not be noticed, but if the different fibers are in

threads adjacent to each other, the slightest difference in tone is easily detected and shows plainly the mixed fiber construction of the goods. So much has already been written on the subject of union dyeing that we may pass over it rapidly, but one comment seems to be in place and that is—as the relative affinity of mixed fibers for the dyes is so largely dependent on temperatures, as well as alkalinity of the bath, we should never trust to the old fashioned method of dipping a thermometer into the steaming liquor and trying to read the temperature from time to time, but should either have a permanent thermometer attached to each machine or use automatic temperature control.

FAST DYES

Mixed fiber dyeing may be raised to a much higher plane and the ultimate value of the goods increased by the use of fast colors. There are a number of very fast substantive dyes which will dye all vegetable fibers, excepting acetyl silks, and leave the animal fibers unstained, especially in a slightly alkaline bath and there are many neutral dyeing fast colors that will dye animal fibers under the same conditions and leave the vegetable fibers undyed. The use of both these classes of dyes on a mixed fiber fabric, whether it be a woolen suiting or silk hosiery with cotton heels and toes, is not dependant on variations of temperature and the dyer will find that he is able to make a good match of the required shade much more easily than when the dye shifts from one fiber to the other with each change of temperature. Practically all hosiery dyers have formulae calling for eight colors, some union dyes, some silk dyes and the rest cotton shading colors and the possibilities of a tried formula often giving varying results are too well known to all who have engaged in this line of work.

VARIOUS FIBRES

Today we have a problem that is none too well solved and that is where there exists a mixture containing no animal fibers at all but various chemical and physical modifications of cellulose. Starting with ordinary cotton and following with mercerized, then Tubize, Viscose and Bemberg we have a series of cellulose fibers that differ widely in their affinity for the dyestuff and sometimes will even give a wide variation in shade. This problem is still far from solution; in case of mixtures on only two of the fibers mentioned it is sometimes possible to find a dye that under certain conditions of temperature, depth of shade and salt concentration, will give fairly good results. In most cases where these fibers are shown fairly evenly covered it will be found that one or another has the dye only loosely affixed and is in the nature of a stain rather than a true dyeing. The best results are obtainable in light shades without the addition of salt until the cotton has filed up. Medium shades require no salt whatever and in dark shades it is always difficult to fill cotton in the presence of any of the rayons. As stated before, much depends on getting the proper dyestuff as there are but few available.

Mixtures of silk and wool cause more trouble in their preparation than in dyeing. Acid dyes in an acid bath are very sensitive to the temperature and the color will shift to either fiber in a short time as the temperature changes. A safer and better way of dyeing these mixtures is by the use of the fast neutral dyeing colors, which are also better adapted for later discharge printing.

Since the acetyl silks are generally used for effect threads and are either dyed or left white, we will consider them later under multi-color dyeings. There are however now on the market a number of fabrics made of acetyl silk and cotton, acetyl silk and rayon and acetyl

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silk and pure silk. The preparation of all except the last is simple but where the gum silk is to be stripped of gum, we dare not use the old method or the acetyl silk would suffer. In such cases the over-night soap bath sharpened in ammonia had better be used.

It is customary to dye such goods on a jig; the best reason for this being that a shorter liquor may be used and the expense of dyeing kept lower. Regardless of the fiber combination, the acetyl silk is dyed first, always keeping the temperature below 175 deg. F. then the matching of the other fiber to the acetyl silk is a very simple matter.

Multi-color dyeing in general is much easier than dyeing a perfect solid shade on mixed fibers. We have available many dyes which will dye one fiber and leave the others unstained, excepting of course the various rayons and cotton. The very contrasts which were so much trouble in dyeing solid shades are often utilized to produce tone effects, and as the dyer is often permitted to make the first line of samples, he has only to duplicate his own work.

WOOLEN AND WORSTEDS

Woolen and worsted goods are often dyed with silk effect threads. In such cases you must obtain dyestuffs recommended for the purpose by the manufacturers; some are acid dyes but many are after-chromed colors. These need a special caution: the action of the chrome must be complete, because if the proper color change has not been brought about in the dyebath or if much free chrome is left in the goods, there will be a further change when subjected to the heat of the dryer or the finishing processes and either the whole shade will change uniformly or result in clouds or shaded goods.

ACETYL SILK EFFECTS

When we consider goods made with acetyl silk effects we have a new series of problems. We may obtain cotton dyes that do not stain acetyl silk, real silk or wool and we may have wool or silk dyes that do not stain acetyl silk or cotton or rayon, but all dyes for acetyl silks will slightly tint cotton and rayon and more strongly tint wool and silk. The cross tints may be removed and the ground color will be darker than the effect threads, so the tint may easily be dyed over without giving it further thought. It is always well to dye the acetyl silk in as short a bath as possible, to economize dye. The attempt to make a shade on an effect thread with the same percentage of dye as was used to dye a skein of 100 per cent acetyl silk often ends in failure and a complaint against the dyestuff. We must consider that the effect threads are but a small percentage of the total fabric and that although the dye has no real dyeing affinity for the other fibers, yet it is absorbed by them mechanically and kept out of circulation. Our only chance of getting the full value of the dye is to prolong the time or use more color. In the days when cheap cotton speck dye was used on wool pieces, the same state of affairs existed but as the dye was inexpensive and the excess was returned and used over, there was no protest. Similar means may be adapted to conserve the dyes used for acetyl effect threads.

Finally there is the consideration of the dyeing of fibers for use in mixed fabrics, which we generally call cross-dyeing. There are three classes of such dyeings; deep shades, like sulphur black on cotton, which is to be over-dyed, bright effect threads on silk that are to be left undyed in wool goods and finally resisted threads that have received special treatments.

Many classes of fabrics are made up with certain cotton threads already dyed with sulphur black. These are

not only for designs but may form the backs of wool, silk or mohair plushes. There has been one great objection from the start; sulphur black, when acted on by acids, is especially inclined to become tender some time later. This is said to be due to the further oxidation of some of the sulphur in its composition, so it is recommended to complete the oxidation of this dangerous part of the sulphur by giving it an energetic oxidation with chrome and acid as soon as it is dyed. This makes the black a trifle redder, but after it is washed there is nothing left to oxidize and tender the goods later on.

Cotton threads for cross dyeing may be of the better class of developed colors, sulphur colors, vat dyes or naphthols. All of these are too well known to need further comment. The same will apply also to rayon.

Silk effect threads, whether for resist or not must take into account the fact that the goods will have to stand scouring or a light milling before dyeing, hence the regular acid dyes are not suited. Fast neutral dyeing colors which will stand milling or else vat dyes of the indigoid class will give the best results. Silk is resisted, and wool may be put through the same process, by first dyeing it with a fast color and then saturating the fiber with tannic acid, which is then fixed with tin crystals. Now as this tin tannate, especially after it has contacted with alkaline soap, has a rich orange tan color, it is evident that while it would not show much influence on an orange, gold or deep red shade, it would make a very poor showing of a royal blue or violet. If a definite shade must be furnished, it is not possible to use enough resist to fill all the requirements, while if fully resisted the shade will be flat. This difficulty with resisted silk will probably be solved by the further use of acetyl fibers, immunized and amidized cotton.

From these remarks it may be noted that the subject of dyeing fabrics made of mixed fibers may easily include all the colors the manufacturers have put on the market, so there will be little difficulty in getting all the first hand information we may require when the need arises.

Development of Skilled Labor for Dyeing and Finishing Plants

BY S. L. HAYES

Chairman Piedmont Section A. A. T. C. C.

An advertisement which recently reached by desk reads as follows: "The New Year brings—new days to use—new hopes to fulfill—new conditions to meet—new problems to solve—new adjustments to make—new standards to maintain—new accomplishments ahead." We are passing through an era of world wide depression in which our industry has had its share of reduced production and lowered prices. But we are on our way out—that seems to be the general opinion of most industrial leaders and bankers. In coming out of it we are going to have—new conditions to meet—new standards to maintain." Out of these periods of depression comes new efficiency, and the present day task of every manufacturing executive is to bring his plant to the point where it can participate profitably in the new business which is coming. There has never been a time in the history of the textile industry where competition was as keen as it today. It is not that the fit survive—it is the survival of the fittest.

During the past few years we have seen a tremendous change in business organization. Merger after merger has been the order of the day, with resulting centralizing

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EVERYBODY'S BUSINESS

By FLOYD PARSONS

Premature Burials

THE two things requisite to success as the new year commences are courage and vision. It requires nerve to formulate and carry out definite plans of expansion when trade has fallen to a level 27 per cent below estimated normal and 33 per cent below the level of the summer of 1929. But all the experience of the past favors those who are now proceeding with confidence in the work of getting the wheels of industry moving once again in satisfactory fashion.

Never before has any nation paid so dearly for the fun of conducting a crazy stock-market boom. Never have our bankers left themselves so completely open to indictment for their failure to adhere to the proved principles of sound finance and economics. To ignore the fact that the nation's leaders in Wall Street and elsewhere either actually fostered the absurd inflation of security prices, or at least did little to prevent the rise, is merely an evasion of an ugly truth.

Eminent economists are now pointing out the chief causes of the depression. They say that our current troubles have resulted from an international race to increase production and capture markets; from the breaking down of the price-control schemes, which seriously contributed to the collapse of commodity values; and from a protracted period of acute credit stringency. This is all very sound and interesting, but we may well inquire if these three forces would have been destructively operative in the absence of an era of frenzied speculation. Seeing their own stocks at dizzy levels, it is no wonder that managements engaged in a mad race of expansion to try to justify the absurd prices.

We are now entering not only a new year, but a new decade that will witness the development of the greatest period of prosperity ever known. If our memories do not fail us and the distressing experiences of today are not too easily forgotten, this new cycle will be more enduring than any of its predecessors. Surely we are justified in believing that there must come a time when the powers of science and technology which have worked mechanical miracles for us, will serve mankind equally well in the important fields of economics, politics and finance. While human nature cannot be changed, it may be bridled.

One of the most notable happenings of the year 1930 took place at its close. That was the cut in the New York rediscount rate of two per cent, the lowest ever recorded in this history of the Federal Reserve System. Just as the establishing of a six per cent rediscount rate in 1929 served warning to the entire world that the boom in the stock market was to be terminated, this recent action is equally significant in pointing to the nearby end of needless and damaging deflation.

The underlying motive of the recent bear market has been to convert securities into cash. This motive must now gradually disappear since money has become one of the cheapest commodities in the world. Just as the effect of the six per cent rate was not instantly apparent, so we may be compelled to wait a few weeks for the record low rate for money to be evidenced by a flow of

funds into bonds, mortgages and a great many of the reservoirs of frozen credits.

It takes much longer to build up prices than it does to knock them down. However, the vital facts in the present situation indicate that the end of urgent liquidation has been reached. Current conditions are the exact opposite of what they were 16 months ago. Then the yield on stocks was less than three per cent in a nine per cent call-money market. Now the average yield on stocks is three times as great as the rate for money.

Calamitous predictions have largely been realized. The outlook of the public is gloomy. The preachments of the apostles of optimism such as myself are now as largely disregarded as were our warnings of danger two years ago when I published a picture of a bread-line inscribed with the illuminating title, "Let We Forget."

Caution and economy have run to an extreme, money has taken to cover, bankers have developed a liquidity complex, investors have failed to realize what a tremendous amount of bad news has been discounted by a drop of 136 points in eight months in the average price of a selected list of leading industrial stocks, and Mr. Citizen is overlooking the likelihood that many years will elapse before there is another such opportunity for the profitable use of money and courage.

Having reached the bottom of the long decline, it is essential we now look ahead to what is coming in our major lines of business. People are very blue concerning the future of our railroads. Many appear to feel that rail transportation has reached its peak.

Although the mileage of the carriers did not increase in the last ten years, they have gone rapidly ahead with an intensive rather than an expansive program. Radical changes in equipment and practices are now indicated. Electrification projects actually under way or in the course of planning call for an expenditure of nearly \$500,000,000, and this is a modest estimate in view of the fact that it costs a million dollars to electrify 20 miles of road.

The use of electrical energy affords rapid acceleration, quick switching and relief from smoke and soot. It makes possible the haulage of heavier trains at higher running speeds and effects a 75 per cent reduction in train-handling movements in and about terminals. Its advocates believe that the economies from large-scale electrical operation will so far exceed current expectations that the result will be a boom in electrical projects surpassing all of today's estimates.

Also near at hand are important developments in the air-conditioning of railway cars, to insure comfortable and healthful travel at all times of the year. A closely connected movement will be the growth of the modern refrigerator car. New equipment under automatic control will economically maintain temperatures sufficiently low to transport products in a frozen condition. Quick-frozen orange juice will be shipped from Florida and California in large quantities, thus saving the cost of transporting the whole orange.

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PRACTICAL DISCUSSIONS BY PRACTICAL MEN

Speeding Up the Licker-in

ANSWER TO D. D.

Editor:

I note the question by D. D., who wants to know whether an increase in the speed of the licker-in on his cards will have an effect on the staple of the cotton and whether it will give him better or cleaner work.

In my opinion, if he increases his licker-in speed he will get a somewhat cleaner web and the breaking strength will show some increase. D. D. Failed to give the speed at which he is running his licker-in at present. It would be easier to answer his question if he had given the speed. It, of course, should not be too high.

K. L. W.

Editor's Note—Walter C. Taylor, secretary of the Southern Textile Association calls our attention to the fact that the question of increasing speed of the licker-in was discussed at a meeting of the Texas Textile Association and that a report of the meeting carried in the Book of the Proceedings of the Association, dated July, 1930, has this to say on the question:

"Hugh S. Clarke reported a test on two different licker-in speeds, the test running for 80 hours. He ran a test at 434 r.p.m. and one at 507 r.p.m. At the slow speed, he said the flyings were 4.88 in ten hours, and on the high speed, 6.12. He said at the higher speed the web was noticeably cleaner, but beyond that he saw no difference except the amount of fly. There was no long staple in the fly at the higher speed, he said.

"W. F. Smith, of the Mexia Textile Mills, reported on a test at 446 r.p.m., 492 r.p.m., and 534 r.p.m. At the lowest speed, the droppings were 27½ pounds, at 492 they were 25½ and at 534 they were 27½ pounds. The strips did not vary at the different speeds. The test was run for 44 hours, and during this time the cylinder strips were: 446 r.p.m., 6.34 pounds; 492 r.p.m., 5½ pounds; 534 r.p.m., 5½ pounds. Flyings and motes were 446 r.p.m., 21 pounds; 492 r.p.m., 19½ pounds; 534 r.p.m., 20¼ pounds. As to breaking strength, he said they got several pounds better break at the highest licker-in speed, and that they are changing more of their cards over to it."

Roving Breaking Back in Creels

ANSWER TO D. M. B.

Editor:

In answer to the question as to the causes of roving breaking back in creels on spinning frames, will say that there are a number of causes for this. D. M. B. should first of all check up to see whether his creels are level and the skewers in good condition. If they are not, he may not have to look any further for his trouble.

Probably the commonest causes of this trouble is insufficient twist. Stretched where the ends have been run too tight is also a cause for breaking back. Other things that will cause this trouble are accumulation of lint around the bottom of the skewers, bobbins run too full,

trumpets in poor shape. There are a number of other things that will make the roving break back, but trying to run without sufficient twist is very likely the trouble if various parts of the frames are in good condition.

D. C.

Degumming Silk Hosiery

ANSWER TO K. L. B.

Editor:

In reply to the question by K. L. B. who asks which is the better boil-off agent, oil or soap, I think he has raised quite a question. There is a good deal of argument on both sides of the question. Personally, I prefer the boil-off oil. A good boil-off oil will do the work quicker and more economically, due to the fact that oil penetrates quicker than soap and less of it is required. I think the action of the boil-off oil gives more uniform results and therefore should result in more level dyeing.

I know that there is quite a division of opinion on this subject and I doubt if the question by K. L. B. can be satisfactorily answered by anyone.

Tenn.

Uneven Wear on Travelers

ANSWER TO F. A. L.

Editor:

I notice in your paper that F. A. L. sent you a spinning ring badly worn on the outside. I think if the spindles were plumbed, the right circle and weight traveler run, in addition the right size band and proper lubrication, the trouble will stop. Spindles that are out of plumb cause excessive wear on the ring. Travelers should be run according to number of yarn being spun and speed of spindle. The lighter the traveler and faster the speed, the shorter the life of ring. If spindles are plumb, and you have good lubrication, the less vibration and longer the life of the ring.

Spinner.

Pre-Shrinking Cotton Goods

Editor:

We are interested in getting all the information possible that will be of assistance to us in pre-shrinking cotton goods. We are especially interested in 36-inch 3.00 chambray for work shirts. Any information you can furnish us, or obtain from some source, will be appreciated. We would like to find out if there are any chemicals that can be used that will facilitate the shrinkage more than simply putting the goods through water. We are especially interested in any information that can be obtained as to the methods that are practical to use in the drying of these goods. We know, in a general way, about the "Sanforizing" method that has recently been put on the market, and are more especially interested in methods that do not require such expensive equipment.

Manager.

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Dyers, Bleachers, Finishers Enjoy Banquet

The banquet session of the meeting of the Dyers, Bleachers, Finishers and Mercerizers Division of the Southern Textile Association, in Charlotte last Saturday, featured a number of excellent addresses interspersed with a variety of entertainment that kept the large crowd in excellent humor. The orchestra, the dancing girls, the soloists and the double octette from the Good Fellows Club were among the headliners on the program.

Paul F. Haddock, chairman of the Division, was toastmaster and very ably handled the program.

After invocation by Marshall Dilling, Mayor Wilson of Charlotte, welcomed the visitors, the response being by J. O. Corn, president of the Southern Textile Association. A number of distinguished guests were introduced by Walter C. Taylor, secretary of the Association.

S. L. Hayes, chairman of the Piedmont Section, American Association of Textile Chemists and Colorists, made a very interesting address on the training of workers for dyeing, bleaching and finishing plants. His remarks appear in full elsewhere in this issue.

David Ovens, general manager of the department store of J. B. Ivey & Co., Charlotte, gave the meeting some very worthwhile advice upon the subject of increasing sales of piece goods through originality of design and quality of manufacture. His remarks, in part, follow:

Address by David Ovens

Now, a lot of you mill people think a retail store is the agent of a mill; its the clearing house, or dumping ground for the stuff that you make. There never was a worse mistake than that. We don't care what you make; it isn't our business to sell the stuff that you make. The retailer don't care what you make. The retailer has only one responsibility, and that is not to the producer but to the consumer. We retailers are the agents of the consumers. We are the buyers for the citizens of a community. We are not the agent for what you mill people choose to make. Now I want you to get that from a retailer; because I have been told that all my life.

You know, we retail people have to do what the women tell us. You do too, but you wouldn't acknowledge it. You know, as well as I do, that there isn't a man listening to me talk that can control one woman, let alone a whole state full of them. We have got to do what they tell us. We have got to get what they want, not what you make.

It would be all right, the old plan, if you could keep the style magazines out of the State; if you could keep the Vogue, and Vanity Fair, and all the other fashion magazines, and the House and Gardens, and the other things that keep your wife and mine educated on what style is right in America—then you could sell all that scrap that you make. Nowadays I have to be careful. We could make them take anything in the old days, and we could buy six months supply, and when we came home, whether they liked it or not, it was the best they could do, and they had to take it. But they don't any more. They come and look it over, in a supercilious manner, with a lorgnette, and say they don't want it.

"It isn't right, it isn't correct, it isn't in Vogue, it isn't the fashion;" and there we have it.

WHERE STYLES COME FROM

You know you mill people, I have got it in for you, and this is the first chance I have had to tell you, and I certainly am going to take advantage of the opportunity! You still think you are the ones that set the styles, and you are that ignorant. You still think styles are created in a mill, a factory, or a store; but they are not. No style is put on the market in a mill.

Where do the styles come from? Well, I will tell you. They are put in the world by a group of women that may be denominated by three words: Rich, sophisticated, slim; rich, yes, internationally rich; sophisticated, internationally sophisticated; slim, because no fat woman ever started anything, except a diet for reduction, or the like. Nobody wants to look like a fat woman—nor a fat man either.

Now I am going to tell you where the styles come from. These women are dominated by these words, as I have told you: the rich, the sophisticated, and the slim. They go to the dressmakers of the world, they pick out what they think will look well on them, and its style, whether the rest of them like it or not. And where do they wear them: They wear it in Paris, in London, in New York, and probably Palm Beach, and what these rich, sophisticated, slim, women wear goes around the world as style. And it will start it all over this country like measles in an orphanage asylum. And then you tell me I don't know where the styles come from? And yet I have heard of people trying to start a style in Gastonia. Why they had a cotton ball, and we had one here, and we were even so dumb as to advocate the wearing of cotton stockings. Yes, we even suggested that the women should wear cotton stockings! The most absurd thing in the world! Why, you can't start anything in Gastonia, or in Charlotte, of that kind. Nobody cares what your women and my women wear. It will not get outside of the county limits. What will it amount to after you have just a few people doing it; it won't amount to anything.

SEEK NEW MATERIALS

Now, I have told you where the styles come from. And I tell you that these people, these dress makers, and whatever they may be, are looking for new materials. They are looking for ideas, they are looking for new fabrics, new colors, new conceptions of beauty, out of which to make these clothes. That is your job. That is your job, in this division of the industry, to create something different, to put your imagination on it, put your talent on it, and let them have it, and these women will wear it and it will go around the world as the style of the world, and it will go around in no other way. Now then, they are looking for new things, the world is looking for new things, the world pays for ideas; nothing else matters. You are worth a dollar and a half a day from your chin down. The world pays for what you can create, for new conceptions, and the world is waiting for trial blazers, not sample matchers, not a guy who says "I can make that." Somebody has made it before you saw it.

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PERSONAL NEWS

J. M. Lee, of High Shoals, N. C., has accepted the position of overseer of weaving at the Massapoag Mills, Lincolnton, N. C.

R. M. Ross, formerly overseer carding at the Palmetto Mills, Columbia, S. C., has become overseer of No. 1 carding at the Clyde Mills, Newton, N. C.

H. L. Dillard has resigned as overseer carding at the Clyde Mills, Newton, N. C., to become superintendent of the Martel Mills, Asheville, which have been leased by the Clyde Mills.

J. F. Bridges has been promoted to head loom fixer at the Clyde Mills No. 4, Newton, N. C.

R. A. Fairchild has become overseer of carding at the Clyde Mills No. 2, Newton, N. C.

M. P. Petty, well known carder and spinner, of Chester, S. C., who was recently severely injured at the Eureka Mills, is recovering from an operation made necessary by the accident. He is recuperating at his former home in Orangeburg and expects to resume his duties in the near future.

Erwin N. Darrin of Hopedale, Mass., vice-president of the Draper Corporation is moving to Spartanburg, S. C., February 1 where he will have general charge of the Southern business. Walter M. Mitchell will continue in charge of the Atlanta, Ga., office and Clare H. Draper, Jr., will continue in charge of the Spartanburg office.

William Toll, treasurer of Sipp-Eastwood Machine Company, Paterson, N. J., is reported very ill and is a patient at St. Joseph's Hospital in Paterson. Reports state that Mr. Toll a few days ago had an attack similar to the one he suffered on his way down to the 1928 Southern Textile Exposition, at which time he was removed from the train at Charlotte, and carried to a hospital where he underwent an emergency operation. Mr. Toll has many friends in the Southern textile industry, and they will wish him a speedy recovery.

James Wright has been promoted to night overseer spinning at the Arcade Cotton Mills, Rock Hill, S. C.

S. D. Boyd has been promoted to overseer spinning at the Arcade Cotton Mills, Rock Hill, S. C.

T. B. Blackwell has been promoted to overseer carding at the Arcade Cotton Mills, Rock Hill, S. C.

J. C. Cowan, Jr., is acting as superintendent of the Stonecutter Mills, Spindale, N. C.

C. W. Causey, Jr., treasurer of the Pomona Mills, Greensboro, N. C., has been elected vice-president of the Greensboro Country Club.

Ed. S. Kempton, who has been connected with Mill Devices Company, Gastonia, N. C., for the past several years has returned to Gastonia in the capacity of sales manager and will hereafter make headquarters in the knitter factory.

George Spofford, treasurer of the Edwards Manufacturing Company, Augusta, Me., and the Androscoggin Mills, Lewiston, Me., will also be manager of the Delgado Mills, Wilmington, N. C. The mills in Maine are controlled by the Insull interests who also recently purchased the Delgado Mills at receivership sale. Mr. Spofford was formerly general manager of Langley and Aiken Mills, at Langley and Bath, S. C.

M. J. Bates has resigned his position as overseer of cloth room at Sylacauga plant of Avondale Mills, Sylacauga, Ala., which position he has efficiently held for the past fifteen years.

David Tousignant has been appointed superintendent of the Delgado Mills, Wilmington, N. C., recently purchased by the Insull interests, of Maine. He was formerly superintendent of the Langley Mills, Langley, S. C.

OBITUARY

FRANK WILLIAMS

Durham, N. C.—Frank Williams died suddenly Tuesday morning, January 6, 1931 at his home on Parrish Place. For the past five years he has held the position as overseer of the spinning room at the Golden Bell Cotton Mills, Durham, and was well liked by all who knew him. He received his mill training at the Cabarus Mills, Concord, N. C., and was overseer of the spinning room at the Brown Mill for a number of years.

He was born in Wilmington, Del., May 13, 1882 and was therefore 49 years of age.

Club Studies Production Methods

Whitmire, S. C.—The Whitmire Progressive Club met Friday night, January 9th in the Y. M. C. A. gymnasium. The subject for the meeting, "Production and How it may be Increased" was thoroughly discussed by members from each department, and many interesting and instructive points were brought out.

Roddey's Speech Read to Women

Gastonia, N. C.—An address on "Cotton and Its Economic Status," scheduled to have been delivered by Wade B. Roddey, prominent Gastonia cotton mill executive, before the annual meeting of the South Carolina Federation of Women's Clubs, Thursday, was read to that convention Thursday morning by W. Grady Gaston, executive secretary of the Gastonia Chamber of Commerce, when Mr. Roddey was prevented by illness from attending the meeting. Mr. Roddey, an executive of the Winget-Armstrong chain of mills, is a patient in a Charlotte hospital.

The meeting, which was attended by many prominent South Carolina women and State officials, among whom was Governor Richards, was concerned chiefly with a study of ways and means for aiding the Southern cotton farmer and manufacturer, and with plans for a wider-uses-of-cotton campaign.

Proximity Mills to Pay Off With Checks

Greensboro, N. C.—Beginning this week, employees of Proximity Cotton Mills will receive their salaries and wages in the form of checks instead of currency and silver, it was learned from Herman Cone, treasurer of the Proximity Manufacturing Company.

For the present at least, the system of meeting the payroll with checks instead of currency and cash will be in effect only at Proximity Cotton Mills and not at the other plants of the Proximity Manufacturing Company, namely, White Oak Cotton Mills, Revolution Cotton Mills and Proximity Print Works. No decision as to whether the new system will apply later to these other plants has yet been reached.

Cotton Goods Production Shows Impressive Drop

THE following summary of production in the cotton textile industry during 1930, prepared by the Cotton Textile Merchants Association of New York, shows the drop in spindle hours in the past year and the number of square yards of cloth that were consequently kept off the market. The report reflects the severe curtailment last year and is distinctly encouraging to those who see the necessity of controlled production. The report says:

DECREASED OUTPUT

Production in the cotton textile industry for the calendar year 1930 will be held far below the figure of 8,777,887,000 square yards reported by the Census Bureau for 1929, when the cotton spinning industry operated at 74.7 per cent of its single shift capacity, according to an estimate based on figures now available.

Spindle hour reports released by the Bureau of Census of the Department of Commerce show that during November, 1929, the industry operated at 100.7 per cent of capacity. It is interesting to note how this figure compares with operations during the latter part of 1930. Spindle hour reports during that period show that the cotton textile industry operated at 80.1 per cent of capacity during November, 77.1 per cent of capacity during October, 73.4 per cent in September, 65.2 per cent in August, 67.2 per cent in July and 76.2 per cent of capacity in June, 1930.

Up until December 1, 1930, the number of active spindle hours aggregated 70,786,000,000, a monthly average of 6,435,000,000 compared with a monthly average of 8,300,000,000 spindle hours for 1929. Therefore, if spindle hours activity for December does not rise above the average monthly figure, the total number of spindle hours for the year will not exceed 77,222,000,000. This would indicate a reduction in running time of at least 22,382,000,000 spindle hours over 1929, equivalent to 22½ per cent.

AN IMPRESSIVE REDUCTION

There is no reason to suppose that the spindle hour activity for December will show a sudden rise over the preceding month since no reports of unusual operations have been current. In 1927, 1928 and 1929 the spindle hour activity for December was substantially less than November. The reductions ranged from 731,000,000 to 1,000,000,000 spindle hours. If the December, 1930, activity should be in the neighborhood of five billion spindle hours, the total reduction for the year 1930 over 1929 will be approximately 24 per cent, representing a reduction of about 1,970,000,000 square yards of cloth over the year 1929 based on the 1929 production as reported by the Census Bureau.

According to Census Bureau reports, the total square yardage of woven goods (over 12 inches in width) based on figures compiled for alternate years, amounted to the following since 1919:

Year	Square Yards
1919	6,232,842,000
1921	6,703,835,000
1923	8,264,219,000
1925	7,741,568,000
1927	8,800,673,000
1929	8,207,887,000

Assuming that the above estimate of the total production for 1930 is substantially correct, it will be seen that

last year's production will be lower than any year since 1919.

Surely this represents a clean-cut victory for those who have wisely and insistently been outspoken for a materially reduced output of cotton cloth during the year just closed. It is not unreasonable to suppose that the benefits from this impressive reduction will be felt in increasing measure during the present year.

GAINS IN TIRE YARNS

A casual survey of the preliminary figures released by the Bureau of Census of the Department of Commerce in connection with the 1929 output of cotton goods shows, as was expected, that the sheetings and print cloth classifications held the lead in volume. These two constructions alone account for 3,317,000,000 square yards, or 40.4 per cent of the total production of 8,208,000,000 square yards.

Narrow print cloths, broadcloths and sheetings and pillow cases were among constructions which registered notable gains in yardage. However, one of the most significant gains was made in the production of tire yarns. The following resume shows the striking advance registered since 1923:

Year	Poundage	Value
1923	60,269,377	\$39,631,780
1925	140,492,454	80,478,625
1927	160,612,114	66,974,970
1929	225,253,874	99,267,577

Cloth Production and Sales Lower

Statistical reports of production, sales and shipments of standard cotton cloths during the month of December, 1930, were made public by the Association of Cotton Textile Merchants of New York. These figures cover a period of five weeks.

Production during December amounted to 234,052,000 yards, or at the rate of 46,810,000 yards per week. This was 23.2 per cent less than December, 1929, and 9.4 per cent less than November, 1930.

Shipments during December were 226,951,000 yards, equivalent to 97 per cent of production. Sales during the month were 182,656,000 yards, or 78 per cent of production.

Stocks on hand at the end of the month amounted to 363,962,000 yards, representing an increase of 2 per cent during the month. Unfilled orders on December 31st were 288,956,000 yards, representing a decrease of 13.3 per cent during the month.

During the year 1930 stocks on hand decreased 97,051,000 yards, a reduction of 21 per cent. This is a clear indication of the success which has attended the efforts of many mills to keep their production in line with the reduced demand during 1930.

For the first time since 1926 shipments for the year have been in excess of production. The ratio of shipments to production for 1930 was 103.4 per cent as compared with 98 per cent in 1929; 98.4 per cent in 1928 and 97.8 per cent in 1927. Stocks on hand at the end of 1930 are substantially less than at the end of the two preceding years.

These statistics on the manufacture and sale of standard cotton cloths are compiled from data supplied by 23 groups of manufacturers and selling agents reporting through the Association of Cotton Textile Merchants of New York and the Cotton-Textile Institute, Inc. The groups cover upwards of 300 classifications or constructions of standard cotton cloths and represent a large part of the production of these fabrics in the United States.

Dyers, Bleachers, Finishers Enjoy Banquet

(Continued on Page 16)

somebody else has dyed it before it came to you, somebody conceived it and dyed it before you had it in your hands. Your job is to think ahead of the crowd, and the man that thinks ahead of the crowd goes on to increased prosperity, no matter what part of the production he may be in.

DON'T BE IMITATORS

Gentlemen, you take a hundred men out of the history of the world in the last two hundred years, and you will go back to the days of the caveman, when he killed his food with a club, and cooked it under a tree in a wood fire out in the woods. Gentlemen, what did you have to do with the creation of the radio, the flying machine, the steamboat in fact, the telephone, or the other things? Nothing. We are seconders of the motion performers. We are sample matchers, all of us, and these things are just handed to us, handed down to us. There is not a bit of sense in taking a piece of cloth and saying, "That is smart, it's pretty good, I can make it a cent a yard cheaper." Who care whether you can make it a cent a yard cheaper or not? You can't make any money that way. You can't make any money that way at all. You are following the other guy. We can only make money in our store when we get away from competition and give them this smarter thing. And you can only make money in your industry and you can only advance in your industry, when you can by imagination and brains develop this creative ability, build a cloth, build a factory, build a finish or a color, that is way ahead of the crowd, and then you will get by with it.

FEW PEOPLE CREATE

Now there are so few people that create anything. You know imagination is one of the finest things we have. You know that, of course. You know a lot of us are poor salesmen. We don't put enough imagination into our business; we are copyists, and we talk like parrots about it. Why, I saw a man in a store one day selling radios. He says, "Yes madam, there is one for a hundred dollars, and this one is a hundred and fifty, and that one over there is two hundred dollars." And then he stopped. A radio! The most magical, mystical thing that has been created by any generation of man in two thousand years! A radio! A thing that lifts up the unseen things into the night, and takes music out of the air and sends it to forgotten corners of the earth! A radio. That thing that sends cheer to that lonely hut, or that lonely cottage, away out yonder on the outskirts of the world! And then we dumb salesmen, say, "Yes, it's a cent a yard," and it is the same thing, we are stealing somebody else's ideas.

I have nothing further to say; except this thing, to drive it home, the idea that we want to tell you people that we retailers of the world are looking for new fabrics, we are looking for men with something to sell that will appeal to the imagination, that we can sell to these women that are style-wise, that don't want the old stuff that we might have; they want something new and smart and clean, with imagination and genius in it, something in which somebody has lavished some thought and some renewed energy on. Then you will have prosperity and will have solved the problem.

A humorous address by Dr. A. C. Chappelle, of Monroe, N. C., concluded the speaking.

Problems of the dyers and finishers were seriously discussed by Amos and Andy in a burlesque broadcast that

shed new light upon many of the dark spots in the industry.

ATTENDANCE PRIZES

Piece goods that were awarded holders of the lucky numbers in the attendance contest were furnished through the courtesy of the following firms:

Celanese Corp. of America, Charlotte; Countess Underwear Co., Charlotte; Fairforest Finishing Co., Fairforest, S. C.; Highland Park Mfg. Co., Charlotte; Rock Hill Printing & Finishing Co., Rock Hill, S. C.; Vann-Moore Mills, Franklinton, N. C.; Ware Shoals Bleachery, Ware Shoals, S. C.

The following were hosts at the banquet which was given complimentary to the members and guests of the Division:

Aberle, Fred, DuPont Paint Co.; Auten Radio & Electric Co.; Brown, James, Arkansas Co.; Bennett, C. Randolph, American Wool & Cotton Reporter; Bruening, R. T., Jacques Wolfe & Co.; Bishop, Claude, Carbic Color & Chemical Co., Inc.; Brooks, Chas. E., Chas. W. Berg Laboratories; Brooks, Chas. E., A. Harrison & Co.; Boyd, Louis M., Scholler Bros., Inc.; Buck, Robt. E., Arnold Hoffman & Co.; Button, J. B., Jefferson Island Salt Co.; Clark, David, Southern Textile Bulletin; Crist, Jno. L., Calco Chemical Co.; Canny, H. J., Oakite Products, Inc.; Cocker, Geo., Cocker Foundry & Machinery Co.; Coker, Frank, DuPont Rayon Co.; Dabbs, Jno. L., DuPont Dyestuff Co.; Dynes, T. W., Haberland Mfg. Co.; Griffith, R. W., Champion Fibre Co.; Glenn, R. W., Ciba Co., Inc.; Griffin, Ira L., Stein Hall & Co.; Grant, R. J., Noll Chemical & Color Works; Haddock, Paul F., A. Klipstein & Co., Inc.; Klumph, Edwin W., Charlotte Chemical Laboratories; Loughlin & Shuptrine, Celanese Corp. of America; McCarty, G. S., American Aniline & Extract Co.; McNabb, William, Quaker City Chemical Co.; McKee, Jno. L., Consolidated Color & Chemical Co.; McKenzie, Malcolm, Sandoz Chemical Works, Inc.; Morrison, Guy L., Penick & Ford Co.; Maultsby, R. C., Textile World; Mebane, R. J., American Enka Corp.; Marlowe, Thomas A., L. Sonneborn & Sons, Inc.; Mayer, H. G., Textile Finishing Machinery Co.; Hayer, H. G., D. & M. Co.; Morse, Dyer S., Newport Chemical Works, Inc.; Neiman, Howard S., Textile Colorist; Oliver, F. M., J. B. Ford Sales Co.; Ovens, David, J. B. Ivey & Co.; Philip, R. W., "Cotton," Porter, F. B., Southern Agricultural Chemical Co.; Potter, Chas. D., Roessler & Hasslacher Chemical Co.; Royce, Albert, Royce Chemical Co.; Rose, H. W., Viscose Co.; Sprock, Howard M., Geigy Co., Inc.; Stigen, B., Anderson, General Dyestuff Corp.; Stone, Chas. H., Chas. H. Stone Chemical Co.; Stough, M. A., Jno. Campbell & Co.; Slaughter, G. G., Atkinson-Haserick Co.; Thompson, A. R., Jr., Roha & Hass Co.; Tilson, Fred O., Mathieson Alkali Works; Virginia Smelting Co., Norfolk, Va.; Weatherly, Robert, Swann Corp.; Wardlaw, James, Lockwood Greene Co.; Waller, Lewis, Hackney Bros.; Willard, W. H., National Aniline & Chemical Co.; White, Fred H., Charlotte Young, Dick, Charlotte News.

A Weeping Handkerchief

The Greensboro Loom Reed Company has sent out to customers and prospects as an advertising novelty a "Weeping Handkerchief" for the use of those who continue to weep about bad business. They said that the business is good and that they have no need for such handkerchiefs.

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Contributions or subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Governor Gardner's Recommendations

The recent message of Governor O. Max Gardner to the North Carolina Legislature was a very able and constructive document.

We are particularly interested in the portion dealing with labor legislation, which was as follows:

I recommend that the sixty-hour week be reduced to fifty-five hours, with adequate penalties for its violation. I recommend that night work for women under eighteen years of age in industry be prohibited; and that educational requirements for children between the ages of fourteen and sixteen years in industry be raised from completion of the fourth grade to the completion of the sixth grade.

Any legislation we enact must, of course, be considered in relationship to our neighboring and competing States and with due regard to the present status of both employer and employee, but that fact should not and must not deter us in our duty as our experience and wisdom direct.

Governor Gardner's recommendations may be classed as follows:

- (1) Adoption of the 55-hour week.
- (2) No girl under 18 years of age to be permitted to work at night.
- (3) Education requirements for persons between 14 and 16 years of age be raised to the completion of the sixth grade.

We are entirely in accord with Governor Gardner relative to the adoption of the 55-hour week. South Carolina adopted it ten years ago and North Carolina and the other Southern States have been too slow to follow suit.

We think that North Carolina and the other States should go one step further and restrict night operations to 50 hours per week.

Governor Gardner recommends prohibiting any girl under 18 years of age from working at night but we believe that we should go a step

further and make it illegal for any boy or girl under 18 years of age to work at night.

Public sentiment is against the employment at night of *any person* under 18 years of age and as that restriction will make it more difficult for mills to operate at night, we consider that it is for the best interest of the textile industry.

The propaganda which has been put out by some mill men in an effort to *retain* the privilege of employing, at night, boys between 16 and 18 years of age, causes us to question their sincerity in connection with the present movement for the elimination of night work by agreement.

It is believed by many that the first sign of an active demand for cotton goods will witness a resumption of night operations upon a large scale because it is an established policy with cotton manufacturers to neutralize every demand for goods with a quick expansion of production and thereby prevent profits.

Why do mill men wish to retain the right to employ, at night, boys under 18 years if it is not for the purpose of being in position to easily and quickly resume night operation and swell production when a demand for goods arises?

The movement for the restriction which will prevent persons between 14 and 16 years of age working unless they have completed the sixth grade has been promoted by those who might be termed the "educator group."

Just as a duck thinks that every yard should contain a pond and that every animal should be forced to enter the water so the "educator group" thinks that education is the only thing worth while.

We believe in education, of course, but we believe still more in the right of people to decide such matters for themselves.

There are many families, including those of widows, who are not financially able to continue their children in school and yet it is proposed to refuse to let the children aid in the support of the family unless they have completed the sixth grade.

There are some boys and girls who do not wish to continue in school and some who could never complete the sixth grade if they did stay there.

In the mill villages, just as in rural sections, a large number of the girls and a small number of the boys are married before they become 16 years of age and the State would be in position of saying to married people, "You must go back to school."

No one has ever been able to show any injury to the health of a boy or girl by reason of having worked in a cotton mill when between 14 and 16 years of age.

We have heard no contention that completing

the sixth grade before going to work will have any effect upon their health.

Persons between 14 and 16 years of age work as spinners or doffers and the work of both is intermittent. It is estimated that during a ten hour day they will, on the average, work about 5.4 hours.

The mill workers do not want the "completion of the sixth grade" restriction and if enacted it will be forced upon them by those who have a desire to regulate the affairs of their neighbors.

If the Legislature of North Carolina will limit day operation of cotton mills to 55 hours and night operations to 50 hours and will prohibit the employment at night of any person under 18 years of age, it will have taken a step forward and we believe that such action will be followed by other States.

The Results of Curtailment

Cotton manufacturers who realized that controlled production offered the only chance for building up an improved market for their products during the past year, have naturally awaited with interest the statistics showing the results of the severe curtailment during 1930.

The report of the Cotton Textile Merchants Association for December, besides the statistics for that month, gives a summary of production, shipments, stocks and unfilled orders for the 12 months just ended. These figures, we believe, offer real encouragement to those who are supporting the curtailment program and reflect the greater spirit of co-operation that has been developed in the industry.

The most encouraging statement in the report and the one most likely to be of greatest benefit in restoring confidence in the markets is the fact that stocks of goods decreased 97,051,000 yards during 1930, a reduction of 21 per cent. Shipments in 1930, for the first time since 1926, were in excess of production. The Association also estimates that the cotton textile industry showed a reduction in running time during 1930 of at least 22,382,000,000 spindle hours, equivalent to 22½ per cent.

The following extracts from the report are of real significance:

During the year 1930 stocks on hand decreased 97,051,000 yards, a reduction of 21 per cent. This is a clear indication of the success which has attended the efforts of many mills to keep their production in line with the reduced demand during 1930.

For the first time since 1926 shipments for the year have been in excess of production. The ratio of shipments to production for 1930 was 103.0 per cent as compared with 98 per cent in 1929; 98.4 per cent in 1928 and 97.8 per cent in 1927. *Stocks on hand at the end of*

1930 are substantially less than at the end of the two preceding years.

While the market for textile products has been slow since the turn of the year, this is normally the case and such seasonal dullness may be expected to give way to increased activity within a short time. The textile picture is gradually becoming brighter and there is growing evidence that textiles are going to be among the leaders in business recovery.

There are, of course, some manufacturers who are unwilling to co-operate in the movement to reduce production and who feel that they should operate without any regard to what others are doing to help conditions. They will find it rather difficult, however, to minimize the results of the 1930 curtailment program. It requires but little imagination to realize how much more depressed the market would have been this year if 97,051,000 more yards of goods had gone to the market.

It is hoped that conditions in 1931 will justify the mills in operating on a more normal basis. In the meantime, it is imperative that production be kept within the limits of demand and that the trend of stocks is downward.

Free Lights—Plus

For years it has been the custom of many mills to furnish lights free to those who occupied houses in the mill village, and everyone knows that the generosity of the mills has been abused because it has been nothing unusual to pass a mill village and see porch lights burning at noon upon the brightest of summer days. The current costs the mill operatives nothing so they let the light burn all days.

A certain South Carolina mill recently decided that it was wise to look into the consumption of current in the mill village and installed meters at 135 houses.

They found that besides one light in each room and upon the porch, they were furnishing free current for the following: 2 vacuum cleaners, 127 electric irons, 27 radios, 6 small cooking stoves, 8 washing machines, 2 percolators, 1 toaster, 41 radiant heaters, 3 sewing machines.

We doubt if many mills realize the amount which they are paying for current for the use of their employees and yet this the time for strict economy.

It appears from the above that 41 mill houses were using radiant heaters at the expense of the company rather than buy coal at wholesale prices.

The installation of meters and requiring employees to pay for all current above a certain amount seems to be justified by the facts given above.

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MILL NEWS ITEMS

BILTMORE, N. C.—The Sayles-Biltmore Bleacheries, which company bleaches and finishes goods, is now operating on a schedule which gives employment to 500 operatives.

HICKORY, N. C.—The Setz-Right Hosiery Mills, which manufactures plain hose and many styles in fancy hose, with a capacity of 800 dozen pairs of hose daily, have received orders for three months ahead.

NASHVILLE, TENN.—The Hartford Hosiery Mills, formerly operating 130 knitting machines, has been sold to R. S. Strickland, who will operate as the Strickland Hosiery Mills. Mr. Strickland was formerly superintendent of the Hartford plant.

TRYON, N. C.—The Pacolet Knitting Company, recently incorporated here by J. D. Cudd, of Spartanburg, S. C., and others, has formally taken over the Wear Knitting Company, which was recently purchased by Mr. Cudd, as noted. The plant has 245 knitting machines, formerly operated on men's hose. J. L. Lee will do the buying.

ASHEVILLE, N. C.—The plant of the Martel Mills, at Elk Mountain, near here, recently headed by the Clyde Mills, of Newton, N. C., will be placed in operation as soon as a number of improvements are completed. The mill has 5,712 spindles and 200 looms and has been operated on crochet and satin quilts, toweling and yarns.

GREENVILLE, S. C.—The fifth printing machine brought to the Southern Bleachery from Garnersville, N. Y., will be in operation by the first of next week. Four other machines were recently installed and are now in daily operation.

The plant at Taylors is enjoying an unusually good business, Mr. Stephenson said. The plant is operating full time during the day and, while not having any regular night shifts, is forced to do much extra running to keep up with orders.

HUNTSVILLE, ALA.—Walter M. Wellman, general agent of the Margaret and Helen Mills, important textile enterprises in Huntsville, has gone to New York to meet Eastern stockholders of the mills, and it is reported here that one of the principal objects of his visit is to make arrangements for the full-time operation of these plants. The mills have been running on part time and irregularly during the last few months.

CORINTH, MISS.—Knitting machines are being received by the Corinth Hosiery Mills, Inc., and work of installation is now being carried forward under supervision of Otto Chicass of Reading, Pa. It will require about three weeks to complete the installation and it is thought the mill will be in operation by February 1. Other machines will be purchased at a rate of three monthly until 24 machines have been received and installed. Organizers believe the mill will be at capacity before the end of 1931. The concern is building a full-fashioned silk hosiery mill costing approximately \$1,000,000. About 600 will be employed when the mill is being operated at capacity.

MILL NEWS ITEMS

WILSON, N. C.—The Wilson Cotton Mills, which have been shut down since December 15, soon will resume operations, putting back 70 operatives on full time, and it is believed that other industrial plants that have been running with reduced forces soon will follow the cotton mill's lead.

ELLENBORO, N. C.—Ellenboro Manufacturing Company, Inc., has become associated with Mill Associates, Inc., of New York, co-operative distributors, who will offer the mill's production throughout the United States. The firm makes a range of cotton spreads and rayon and cotton spreads. These were formerly sold through Bliss, Fabyan & Co.

J. A. Graham, treasurer and manager of the Ellenboro company, will be in the market.

CHESTER, S. C.—H. S. Adams, secretary of the Eureka Cotton Mills of Chester, has issued the following notice of a stockholders' meeting:

"Pursuant to resolutions of the board of directors, a meeting of the stockholders of the Eureka Cotton Mills is hereby called and will be held in the office of its president, Col. Leroy Springs, Lancaster, S. C., Tuesday, February 10, 1931, at 4 p. m. for the purpose of voting on a resolution to increase the capital stock of this company to an amount not exceeding \$850,000, and to consider an agreement to consolidate the Springstein Mills and Eureka Cotton Mills into the Eureka Cotton Mills as a single corporation, as provided by law."

COLUMBUS, GA.—Purchase by the Swift Manufacturing Company, of which Harry L. Williams is president, from the Atlantic Ice & Coal Co., of an old ice plant property here at Sixth avenue and Fifteenth street, just across Fifteenth street from the present textile mills of the Swift Company, for future expansion purposes, has been announced, the consideration being \$8,500.

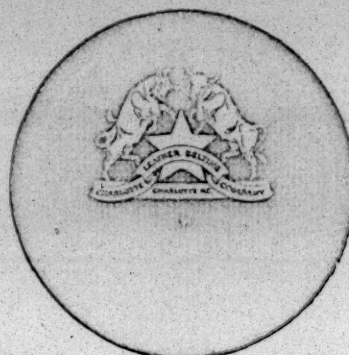
The present buildings on the newly acquired site will be razed and removed right away, according to a statement by Mr. Williams, though he stated that definite plans for developments on the site have not yet been made.

A gradual pick-up in operations at the Bibb, Meritas and some of the other local mills is reported and the local unemployment situation is said to have shown considerable improvement since the beginning of the new year.

ROCKWOOD, TENN.—The newly constructed plant of the Cumberland Silk Mills here, which began operations December 10, is said to be getting well into production, a few additional employees being added to that force each week. The plant started operations with only a few employees. There are 40 silk looms and the product is sold through the office of Riebach & Mandell in New York, owners of the mill. This company will soon maintain three mills in the South, the one at Brewton, Ala., established in 1929, the above and one which is being constructed at Fayetteville, Tenn. The latter will have 60 silk looms. It is understood here that Riebach & Mandell, which operate a number of mills in the East, have plans under way for the removal of these mills to the South.

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MILL NEWS ITEMS

CHARLOTTE, N. C.—The Larkwood Hosiery Mills plan the installation of several additional full fashioned hosiery machines in the next several months. The company has plans for greatly increasing its capacity as soon as business conditions are more favorable.

ROCK HILL, S. C.—The Red River Mills, offered at public sale here, were bid in by the law firm of Haynsworths & Haynsworth, of Greenville. The firm bid \$32,000, of which \$7.00 was offered for the quick assets and \$25,000 for the plant, equipment and real estate.

NEWBERRY, S. C.—The Newberry Cotton Mills have paid a semi-annual dividend of 3 per cent on a capital stock of \$1,000,000.

The Mollohon and Oakland mills, of the Kendall Company, have declared semi-annual dividends of 3½ per cent.

PRACTICAL DISCUSSIONS

(Continued from Page 11)

Spinning Runs Bad After Oiling

ANSWER TO J. M.-GA.

Editor:

In answer to J. M.-Ga. in reference to his spinning running bad after oiling, will say I had the same experience. When I located the trouble I found I had improper lubrication. Spindle oil that will form gum will take more power and when fresh oil is put in, the yarn cuts loose and every spindle that is the least bit crooked or every bolster that is worn, will show up by causing a vibrating spindle, which causes bad running work. My advice is to see that your bands are of the proper size for the counts you are running. In addition: Oil your spindles with a mixture of kerosene. Then have you buyer to purchase for you a spindle oil that is refined down where it will not gum. Plumb you spindles. Now here is your answer. Have your spindles plumb, bands made of the proper size. With the proper lubrication according to speeds, you eliminate your trouble. *Spinner.*

Why Roving Breaks Back in Creels

ANSWER TO D. M. B.

Editor:

I note the question by D. M. B. who is having trouble because his roving breaks back in creels on spinning frames. I have learned from experience that if the skewers must be in good condition and must be set properly.

His trouble can be caused by too much draft in carding, stretched roving, mixing long and short staple cotton, using too much waste in his mixture, mixing long and short staple cotton, using too much waste in his mixture, speeder hands taking up and letting off on speeder, roving not properly laid on bobbin and incorrect twist.

It is probable that D. M. B. is running bobbins of different diameters and causing uneven tension.

Spinner.

How Much Should Yarn Stretch on Slashing

Editor:

I would like to submit this question.

Under average conditions, how much should yarn stretch on the slasher? How much stretch can you have without getting into trouble?

I will appreciate any information given on this question. *Slasher.*

Variation in Sliver

Editor:

Can some one tell me why some of my drawing frames make lighter sliver than others. I am using metallic rolls that are the same size and the other conditions under which the frames operate are as nearly alike as we can get them, but we have the variation in the sliver.

Sliver.

When Filling Sloughs Off

Editor:

I would like some information on the following question:

What is the best type of bobbin to use to prevent sloughing off and kinking of the filling? *O. O. B.*

Tension Gear on Fly Frames

ANSWER TO BIG BOY

Editor:

In regard to Big Boy's question in January 8th Bulletin, "Tension Gear on Fly Frames"—I would advise Big Boy to write Saco-Lowell Shops for December issue of their monthly bulletin volume 3, number 12 and see page No. 3 entitled, "A Card Room Episode."

I will quote from bulletin in part, some of the things that they say will cause the same things that Big Boy is having trouble with, namely: Uneven tension. "In checking over these frames we found that from 1 to 4 of the balance weights would touch the floor when the carriage was at the top change and this condition was found on ten out of twelve frames. On one particular frame with the carriage 1½-inch from the top change, all of the weights were on the floor, thus throwing the

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entire weight of the carriage and bobbins (940 pounds) on the conebelt. This condition was corrected by taking out 2 to 4 links of the weight chain, cleaning and oiling chain pulleys and re-leveling the carriage. On account of the excessive strain thrown on the cone belt they were stretched, thus permitting the bottom cone to partly rest on cone lifter while the frame was running and preventing a full contact of cone belt."

Little Boy.

Rayon Prices Drop to New Low Level

The long expected reduction in rayon prices materialized last Friday when the Viscose Company, largest American producer, lead the way with new price lists which show reductions from 15 to 35 cents per pound.

DuPont Rayon Company later announced a similar reduction and other productions are expected to take the same action.

The latest reduction is the first drop since July, 1930. A prior reduction has been made in May. Previous to that date rayon prices had been unchanged since February, 1929.

In announcing the new prices, the Viscose Company also announced that the new quotations would be protected against a further decline by a 90-day price guarantee until further notice. Since November 20th, rayon prices have been guaranteed by all producers for 60 days.

The reduction in rayon prices and the 90-day price guarantee is expected to have a stabilizing effect upon the market and result in much more activity by rayon consumers. The market, for some time past, has been disturbed and hesitant, due to lack of faith in the price situation. With prices now at the lowest point on record, it is believed that confidence will be restored and trade in rayon and rayon fabrics can go forward in a much more orderly fashion. The reduction in prices had been expected for some time past.

Still another step taken by the Viscose Company toward steadying the market is a change in the bonus arrangement with quantity consumers. The new plan, which is effective and in force as of January 1, will continue through the current year. It provides for a bonus of one-half of 1 per cent on the 100,000, an additional one-half of 1 per cent on the second 100,000 and continuing at this ratio to a maximum of 600,000 at 3 per cent. It is expected that this arrangement will be copied by other producers and replace the much criticized 5 per cent rebate to all consumers regardless of the size of their yarn takings initiated by some rayon manufacturers last fall.

Another change announced by the Viscose Company was the elimination of any differences in price between their high luster and Dulesco (dull luster) yarns. Hitherto the Dulesco quotations had been 3c per pound higher than those for bright yarns.

The new list is also marked by the absence of 150 denier 24-filament yarn, hitherto quoted as the standard viscose yarn. The Viscose Company's official statement follows: "The following prices are effective January 9, 1931:

NEW LIST PRICES

Denier	Filament	Quality	
		First	Second
75	18	\$1.35	\$1.25
75	30	1.35	1.25
100	18	1.10	1.00
100	40	1.10	1.00
125	36	1.10	.90
150	40	.75	.72

150	60	.85	.82
170	27	.75	.72
200	30	.75	.72
250	36	.70	.67
300*		.63	.69
150†	40		.75

*And coarser. †Oiled knitting cones, suitable for knitting.

"Coning and converting prices same as at present, with the exception of 150 denier 40 filament oiled knitting cones suitable for knitting only, 75c. The above list subject to 90-day guarantee, until further notice, against price decline. Present stocks of obsolete and discontinued 150 denier Dulesco oiled cones suitable for knitting only, 65c per pound, as long as available, but this is offered without quality or price guarantee.

"Change in bonus arrangement effective and in force as of January 1, 1931, and continuing through twelve months. One-half per cent on first one hundred thousand, and continuing at this ratio to a maximum of six hundred thousand at 3 per cent."

Everybody's Business

(Continued from Page 10)

Refrigerated transportation will bring radical changes in many lines of business, just as it has rendered possible the inauguration of dairying in regions where such an activity could not have existed before it was made possible to ship milk and dairy products over long distances.

Perhaps the biggest present worry over the future of the railroads has resulted from the rapid construction

(Continued on Page 24)

Take the Mill Out of the Mud!

When the ground around a building is the same color as the bricks, something is wrong. Red clay and yellow sand have their uses in industry—but as a red-and-yellow carpet around a mill they are hard on the eyes.

Then on a rainy day who wants to walk on sticky, slippery clay? Or slide along on the loose sand? A carpet of green grass, with evergreens, flowering shrubs and shade trees to set the pattern, is easier on the eyes and less ruffling to the temper. The cost of these trees and plants is so little that there is no good reason for not having them around the grounds.

Fence the Grounds with Hedges rather than with Wood or Wire

To help lift the mill out of the mud use hedges along the border lines and drives; put some evergreens at the entrance, and have flowering shrubs along the foundations. If there is room, a little rose garden will be an added attraction. Green grass and these other things will go a long way toward crowding out the mud.

Our landscape service will show you what shrubs and trees can be used to best advantage, and tell you the cost of lifting the mill out of the mud. Our staff will supervise the planting, and a one-year guarantee goes with each job. Just drop us a line, indicating you would like our ideas.

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of pipe lines. Here again the probable losses to the carriers are being exaggerated. The big natural-gas pipe line from Texas to Chicago will displace about 1,600,000 tons of coal annually. This would mean approximately 4600 tons a day, or 92 average-sized cars of coal. The eventual loss to the railroads from the transport of natural gas through pipes should not amount to more than 25,000,000 tons a year. Such a reduction of about 5 per cent in coal tonnage would largely be counter-balanced by increased fuel consumption from the growth of industry and population.

During the last four years, while production of crude oil increased 31 per cent, the transportation of it by railroads decreased 41 per cent. This reduction in oil tonnage carried by the roads has amounted to nearly 5,000,000 tons. But a compensating factor has been the steady increase in the amount of refined oil products the railroads are handling. Last year the big rail systems hauled nearly 38,000,000 tons of refined petroleum products.

The big gasoline pipe lines now being constructed or planned will not greatly reduce the volume of gasoline traffic now handled by the roads and the tank-car companies. Supporting this conclusion is the fact that the average annual increase in the national consumption of gasoline totals about 100,000 barrels daily, and the total daily capacity of all the pipe lines now contemplated or under construction does not exceed this volume. Therefore, even with the pipe systems operating to capacity, the railroads would still have their present amount of business.

The pipe-line menace to the railroads has been over-emphasized. The pessimists are singing the same tune today they sang years ago when the first crude-oil pipe lines were being constructed. The common assertion that the tank-car companies would be put out of business was wholly wrong, for during the time of the greatest expansion of the oil pipe lines, the country's fleet of tank cars increased over 100 per cent.

It is only natural that our big rail systems should fight their growing competition from trucks, buses and pipe lines, and in presenting their case to the public should paint a picture none too bright. However, the railroads have not reached their limit in usefulness, efficiency or earnings. They will soon be handling an increased tonnage of freight created by the refining of petroleum and the wider use of natural gas in industrial establishments. They will be also benefiting from amendments to the Transportation Act that will improve their competitive position.

The rail carriers are approaching the formation of transportation companies which will coordinate the various types of haulage. This will make possible, among other things, the inauguration of store-door or house-to-house delivery service. They will doubtless free themselves of many types of unfair competition, but there will be no suppression of any other form of transportation that can justify itself on grounds of efficiency.

Let us turn next to our metal and mineral industries which are likewise basic in every sense. Here, also, is a form of enterprise that has so far realized but a fraction of its possibilities. Very soon we will see the results of wisely directed efforts to widen the markets for metals by uncovering new uses for all of them. Welded steel construction has been licked and rapid advances are being made toward the production of tinplate in coils and the quantity output of rustless iron and steel.

A wide variety of alloys possessing amazing properties are being employed in the manufacture of all sorts of things that heretofore have been made of such materials as wood and glass, and dozens of new alloys will appear

As research continues. Chromium plating is changing the whole appearance of automobiles and other metal products. Rustless iron has only started on the big job that lies ahead of it in the construction of buildings. A combination of cobalt and nickel is being substituted for platinum in vacuum tubes, and a ferro-chrome alloy for crucibles is changing the entire aspect of brass manufacture.

People are wondering if ever again it will be possible to find a profitable market for our huge output of copper. Here we must not forget that the electrical industry consumes 60 per cent of all copper mined, so if electricity has a future, copper has also. Its growing use with other metals in the production of acid-resisting alloys and its wider employment in the field of building are rapidly expanding the present markets for the red metal.

Veritable miracles will be performed by the chemist and metallurgist with metals in the years immediately ahead. Wrought iron will soon come back to the many uses which call for its special properties. Power-operated equipment has been developed recently to produce large batches of wrought iron weighing 2500 pounds each, as against the laboriously puddled ball of 250 pounds. It cost \$10,000,000 to complete the plant that is now starting to perform this job.

Rare metals that were selling for hundreds of dollars a pound will soon be available in tons at a reasonable price. Some of these, like beryllium, are plentiful in the earth's crust, and possess properties that will make them invaluable in dozens of industries, especially aeronautics and radio. A new paper-thin alloy that is impermeable to hydrogen and helium and able to take the place of layers of fabric on an airship, has made possible the creation of a fleet of all-metal dirigibles. Such achievements multiply the opportunities for metals.

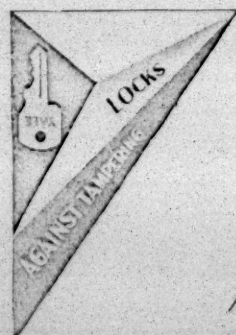
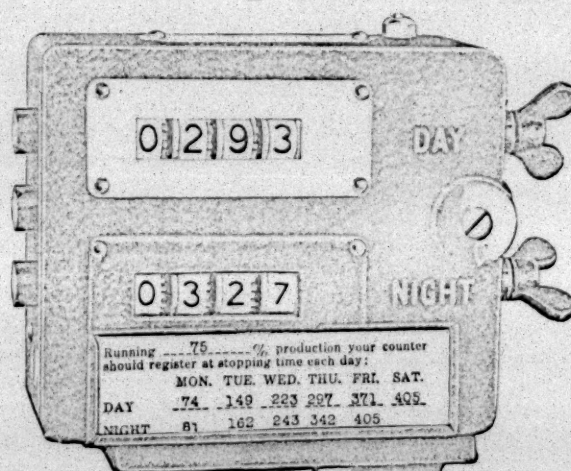
One recently perfected method that turns out sheet steel in rolls like newsprint paper, not only saves 45 per cent of actual labor and produces a unique product, but has increased many fold the tons of steel manufactured per dollar of plant investment.

Even in the case of silver, the annual output of which has increased 77,000,000 ounces in a decade, new uses and new markets are being rapidly developed. One is for tarnish-resisting silver alloys and another is for silver fulminates. Silver has long been a disturbing influence in international trade, and we may be glad that the distress occasioned by its having been discarded as a standard of monetary value in the Orient is reaching an end and will not be repeated. Being a by-product in the mining of other metals, silver production cannot be easily curtailed. It all means a low price for the white metal, but this will open new markets and encourage the search for ways and means to extend its employment in business and industry.

In times of severe business depression the tendency is to relegate major businesses to the discard and stress the idea that years must elapse before there will be any great improvement in trade and commerce. The fact is that the burial of our railroad and mining industries is altogether premature. Our transportation and mining companies will continue to be the backbone of the nation's industrial system. Only in a very few lines of activity are we approaching a saturation point. Even the outlook for our coal industry is brighter today than it was at the commencement of the last decade.

Current gloomy forecasts will be no less wrong than they were in similar periods in the past. It is doubtful if there will come a day in the lifetime of many of us when one can buy a few shares in the United States of America on such favorable terms as now exists.

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The Outlook for Cotton

(From The Asheville Citizen)

One of the most sensible government bulletins we have seen in a long time is that just issued by the Federal Farm Board discussing the outlook for American cotton. It is a practical review of the situation so clearly and simply put as to give Southern cotton growers an intelligent understanding of the conditions under which they must operate if they expect to make any money or even to avoid losses in that period that lies ahead of them.

The Federal Farm Board thinks that the supply of cotton for 1931-32 will be at least as large if not larger than for 1930-31. Unless business conditions improve substantially or the production is cut in some way it is not likely that there will be any improvement in the price of cotton of the 1931 crop.

There is nothing in the present outlook to encourage the indiscriminate planting of cotton this year. The chances are that there will be an acreage reduction but since it is also possible, and even probable, that the yield per acre will be increased, the acreage reduction will have to be very considerable if the total supply of American cotton is reduced.

Already the point has been reached where the one-horse farmer, operating on poor and wornout lands, has hardly a chance even to make ends meet. Cotton today can be grown profitably only on the better lands, where a good yield can be expected; and even then it can be grown profitably only if the farmer improves the quality of his cotton and plants plenty of foodstuffs and feedstuffs.

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Protest Textile Rates

Winston-Salem, N. C.—The Hanes Knitting Company and Proximity Manufacturing Company of Greensboro, and two textile manufacturing association of the State have joined the State corporation commission in filing complaints with the Interstate Commerce Commission, asking an investigation of rates on cotton goods from North Carolina points to official classification and western trunk lines territory.

The two State associations listed on the complaints, there being two, are the North Carolina Hosiery Manufacturers Traffic Association and the North Carolina Full-Fashioned Hosiery Manufacturers.

"Textile Organon," Published by Tubize Chatillon Corp., Takes Cheerful View of Outlook

"An analysis and evaluation of the main determinants of business activity lead us to believe that there will be a somewhat larger-than-normal seasonal increase in business during the late spring months of this year, resulting in a better basic position of activity by about May or June," says the current issue of the Textile Organon, published by the Tubize Chatillon Corporation. Beyond that time, it continues, we would expect a gradual bettering of the situation, provided there are no major disturbances in Europe; a curtailment of agricultural output; and a favorable and constructive use of that intangible thing called Federal Reserve policy both internally and internationally.

Commenting upon the outlook for the rayon industry, in which the company is an important factor, the publication says in part:

"Because we feel that the production and consumption of rayon in 1931 depends primarily upon the degree to which this price problem is solved, and because we do not know what solutions may be effected as the year progresses, we make no forecast of rayon production or consumption for the year 1931 at this time. We believe that the results of the December London conference of rayon executives are not yet apparent nor will they be fully realized for a number of months to come. By this statement, we mean to discount anything which may be announced within the next week or two."

After pointing out the problems which face the industry this year, such as disposal of the price uncertainty; correction of the spurious rebate so as to bring it back to a real standard rebate system; standardization of grades and other problems with which the industry is familiar, the review says:

"Given a satisfactory solution to the above problems of the industry, we anticipate a better year for the rayon industry in 1931. In any case, we are confident that this potential giant of the textile industry will not become a moron; for the interests of its customers, as well as the stockholders who have invested their money in it, will demand that it solve its problems in a man-like, business-like fashion."

Reviewing the cotton market the review says, "daily average cotton consumption has now been increasing steadily since August and we see no change in the current picture such as would lead us to believe that cotton consumption would not continue to show a steady increase in the next few months."

Machinery Companies Merge

The Southeastern Machine Company of Atlanta, Ga., and the Greenville Spindle & Flyer Company of Greenville, S. C., have merged and will be operated in the future as the Southeastern Machine Company.

In order to take care of the growing business of this concern it has been found necessary to build an addition to the Greenville plant.

This concern does general overhauling of all kinds of textile machinery and the re-working of steel rollers, bobbles and flyers.

George F. Andrews, president of the Southeastern Machine Company was for 20 years connected with the Maco-Pettee and Woonsocket Machine & Press Company before establishing the present business.



Sizol speaks for itself. It has been on the market for 26 years, and every old weaver knows of its efficiency—the young do likewise.

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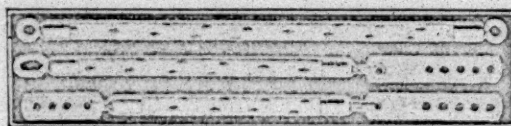
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QUALITY

SERVICE

Dyers, Bleachers, Finishers and Mercerizers Meet in Charlotte

(Continued from Page 9)

of power and responsibility. These mergers were initiated by men who sensed the changing economic conditions, and who were themselves prepared and took the necessary steps to insure the permanence and welfare of their business interests. The inevitable result has been a reduction in personnel of the new combinations, and in general those who had best prepared themselves survived.

The textile industry is not standing still. It needs today not those who are merely proficient in present day procedures and practices, but those who are training themselves along the essential lines of progress, and who will be ready to carry on the developments of tomorrow.

It is self-evident that all who are gathered here tonight are interested in advancement. Otherwise you would not be here. The purpose of this association is to make it possible for its members to broaden their knowledge, and, in doing so, in a perfectly proper way to better themselves. To do this there are three things you must accomplish.

You must train the man who is coming along. You must know your own job in all its details. You must prepare yourself for the position which lies ahead.

That phase of the textile industry covered by the men in this room is perhaps less mechanical than any other. Textile engineers urged on by textile executives, and with the aid of textile master mechanics, have accomplished wonders. New machines have been developed—old machines have been speeded up—labor saving devices have been installed—two ends of cloth run where one did before, and numerous other developments are to their credit. But in the final analysis, we are largely dependent upon our skilled labor.

A poorly trained laborer may in a few minutes cause tremendous damage. And I say "poorly trained" advisedly, for there are far more poorly trained laborers than there are careless or indifferent ones. If you are having continual trouble with careless labor the fault is yours. You are the one who is careless in not taking the time to make it skilled. I am glad to testify to the general intelligence and capacity to learn of Southern labor. It

is the equal of any in the country. The burden of developing it—the task of converting it into skilled labor is ours. The raw material is here for us to work.

Your future and the future of bleaching, dyeing and finishing in the South is largely dependent upon your properly training the man who is coming along. The most valuable recommendation you can have is the ability to develop skilled labor. And by the development of skilled labor I do not mean simply teaching a man to run his machine. Go beyond that—explain to him the principles behind the various operations—urge him to read and study along the lines of his work—listen to him—advise with him and develop in him a spirit of job pride and morale. In doing so you will have the satisfaction of not only helping yourself, your company, but of helping a fellowman to improve his conditions. The man who can do this is the man who will be in demand.

You must train yourself in your own position. This is really the first requirement, for unless you know your own job you cannot train the man coming along, and you would not be worthy to aspire for the job ahead. Most of us here are either past the college age, or have had our college education. That is immaterial. The main thing is to know all there is to know about your own job. If you feel the lack of proper education, you can take some correspondence course. In either case, join those trade or technical associations which will be of most help to you. Attend the various meetings, and join in the discussions. Read the various textile journals, and study all the text books you can obtain. Make yourself capable of directing your department under any changing conditions which may develop.

And finally prepare yourself for the position which lies ahead. A recent article on that great industrial leader, Owen D. Young, emphasized his advancement as being due to his poise, his fairness, his vision, his deep thinking. It would be hard to suggest better qualities to develop. But I would quote you from some of his own writings. Mr. Young says:

"Facts can be applied in any field. Our curse is ignorance. Facts are our scarcest raw material. This is shown by the economy with which we use them. One has to dig deep for them, because they are as difficult to get as they are precious to have."

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"I have been astonished to find in business how many men run away from responsibility rather than welcome it. Most men are willing to venture opinions, but when it comes to deciding on definite action they like someone else to take the final step. Now, I have always welcomed responsibility. Nor have I been afraid to spend the necessary amount of study and work to fit me to discharge a responsibility to the best of my capability. Such increasing responsibilities as have gravitated to me have come largely because of my desire to make myself at all times more useful to the company."

This leaves little to be said. Find the facts about your business. Determine them with precision. Interpret them with vision, and apply them to yourself and your business with fairness. We are emerging from a difficult period. In doing so leaders will be needed who will accept responsibility. If you can acquire the habit of true fact finding, and if you are willing to accept more than your share of the responsibility, you should be one of them.

Institute Compiles Cost Manual on Cotton Yarn

The Cotton-Textile Institute has just published a cost manual entitled "A Method of Predetermining Costs in Cotton Yarn Mills." This manual has been prepared by the Cost Section of the Institute after long study of opinions and practices in respect to cost procedure in the industry, and it is believed that it represents a demonstration of the best composite thought and experience available regarding this subject.

The manual takes an imaginary mill with a given list of machinery, payroll, and variety of production, and shows every detail of the analysis of this basic information and of the final development of individual costs on each variety of yarn which the mill is assumed to be producing. The textual matter embodied in the "Foreword" and in the "Explanatory Notes" should prove of especial interest. Copies of this document are being distributed gratuitously by the Institute to all cotton mills in the country whether yarn mills or cloth mills, and whether members or non-members of the Institute. It is intended that the manual shall serve as a guide for the eventual establishment of uniform methods of cost finding among cotton yarn mills.

It will be noted with interest that the cost manual is composed entirely of cotton fabric, the durability of this material being considerably greater than that of paper.

Cloth Imports in October

Imports for consumption of countable cotton cloths during October amounted to 1,722,116 square yards valued at \$460,881, according to figures made public by the Department of Commerce, prepared in co-operation with the U. S. Tariff Commission.

Of the total importations 505,202 square yards valued at \$93,569, consisted of material not woven figured, unbleached; 139,282 square yards valued at \$33,182, not woven figured, bleached; 757,727 square yards valued at \$223,751 printed, dyed, colored or woven figured, including vat dyed; 307,954 square yards valued at \$105,088, woven with eight or more harnesses or with jacquard, lappets, or swivel attachments; 11,951 square yards valued at \$5,291, material woven with drop boxes.

A. F. Francis, formerly of the Judson Mills, Greenville, S. C., has become loom fixer at the Rollinson Mills, Rocky Mount, N. C.



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COTTON GOODS

New York.—The cotton goods markets were generally quiet during the past week and prices were somewhat less firm. In gray goods, business was confined to moderate sales of print cloths and sheetings. Prices which actual sales were made were approximately the same as during the previous week. Narrow sheetings were slow. There was more interest in wider goods for the mechanical trades.

Denims were reduced 1c a yard and some of the print cloths and sheetings declined a little. Working suit fabrics are easier in price. Printed percales have been sold at lower prices by a few converters; but prices named by corporation printers are still holding unchanged.

The 112x60 carded broadcloths were offered at 8½c for fairly good makes, with up to 8¾c quoted for best grades. The 100x60s sold in moderate to fair quantities at 7¼c for January and February deliveries. A poor grade of 100x60 was purchasable at 7½c. The 90x60s were bid for at 6¾c, with mills firm at 6¾c.

It was reported that some fair sized contracts for high count rayon filled alpacas had been entered into under recent date, and that some other business was held up pending the readjustment of rayon prices. Inquiries for acetate filled alpacas were tentatively made.

Sales of fine sheer combed yarn goods have been somewhat better since the turn of the year and very moderate sized repeat orders have gone forward on some of the fancy weaves for dress purposes. Goods of rayon and cotton mixed construction are expected to show improvement since the repricing of rayon yarns during the week.

A feature of trading was the appearance of a number of small inquiries and orders for wide sheetings and drills, tobaccos and some other fabrics from houses dealing with the automobile trade that were replenishing their stocks to a degree in preparation for an indicated increase in activity in this industry. While the quantities of interest were not large, the development was taken by some as an encouraging factor.

Prices were as follows:

Print cloths, 27-in., 64x60s	4
Print cloths, 28-in., 64x60s	4½
Gray goods, 38½ lin., 64x60s	5
Gray goods, 39-in., 80x80s	6½
Brown sheetings, 3-yard	8¾
Brown sheetings, 4-yard, 56x60s	7½
Tickings, 8-ounce	17
Denims	12½
Standard prints	8
Dress gingham	12½-15

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YARN MARKET

Philadelphia, Pa.—The yarn market, while slow to show large buying, did develop somewhat better business last week and the outlook is considered more promising. Inquiry has recently shown a good deal of improvement and it is apparent that many buyers have reached the point where they are willing to consider larger purchases. Quotations remained on a very low basis, but have held steadier for the past ten days. Distributors here have been considerably encouraged by the larger inquiry and somewhat better business in knitting yarns.

Dealers here are more hopeful that the market will show marked improvement within a short time. During the past month or more, when consumers have been buying on a very limited basis, because of uncertainty over the price situation, spinners have had a poor time trying to maintain prices on a level that was already much too low. As the market shows signs of greater stabilization and fear of lower prices is being overcome, it is believed that buyers will realize the advantage of larger covering at today's prices. It is recognized here that prices should take an upward turn on anything like sustained buying.

Comparatively little more poundage requirement is expected to develop in the insulating division, so far as larger wire companies are concerned. They have already done well by spinners; that have begun to work a good proportion of their spinning frames in behalf of this market. The difficulty of getting waste stock for part waste yarns has acted as an incentive to buyers to cover on their needs, in addition to the conviction as to the time being right to anticipate requirements.

Reports show that the weaving section has not become well started on its new buying wave. A number are found to lean to the conviction that they had best operate on small quantities, instead of purchasing in anticipation of a higher market.

In the plush and tapestry end, dealers are hoping that the current Chicago show will give an impetus to sales, but this will not be reflected in this market until the middle of the month.

Southern Single Chain Warps		40s	35
10s	19 1/4	40s ex.	38
12s	20	50s	45
16s	21	60s	52
20s	22	Duck Yarns, 3, 4 and 5-Ply	
24s	25	8s	21 1/2
28s	27	10s	22
Southern Two-Ply Chain		12s	23
8s	19	16s	24
10s	19 1/2	20s	25
12s	20	Carpet Yarns	
16s	21 1/2	Tinged Carpet, 8s, 3 and 4-ply	
20s	22 1/2	White Carpet, 8s, 3 and 4-ply	
24s	25	Part Waste Insulating Yarn	
28s	27 1/2	8s, 1-ply	16 1/2
32s	33	8s, 2, 3 and 4-ply	17
40s ex.	35	10s, 1-ply and 3-ply	17 1/2
40s	39	12s, 2-ply	18
Southern Single Skeins		16s, 2-ply	19 1/2
8s	19	20s, 2-ply	20 1/2
10s	19 1/2	26s, 2-ply	24
12s	20	30s, 2-ply	25 1/2
16s	20 1/2	Southern Frame Cones	
20s	21	8s	20
24s	22	20s	20 1/2
28s	24	12s	21
32s	25	14s	21 1/2
40s	26	16s	21 1/2
Southern Two-Ply Skeins		18s	22 1/2
8s	19	20s	22 1/2
10s	19 1/2	22s	23
12s	20	24s	24
16s	21	26s	25
20s	21 1/2	28s	26
24s	22 1/2	30s	27
28s	25	40s	35
32s	26		
40s	27		

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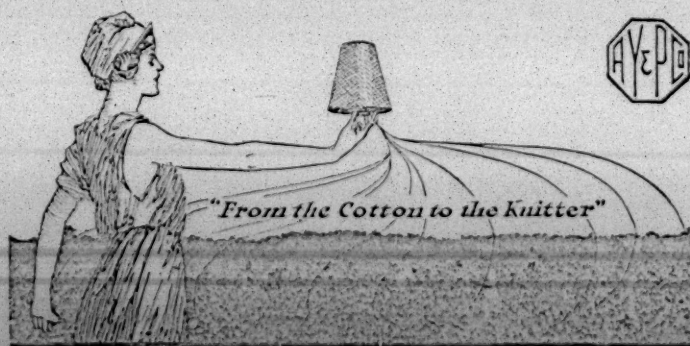
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WANT position as superintendent of yarn of cloth mill. Twenty-two years experience on white and colored work. Address T. L. S., care Southern Textile Bulletin.

WANT position—cost accounting and designing. Experienced in both. Good references. Salary secondary to opportunity. Textile education. Address "Costs," care Southern Textile Bulletin.

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New Bedford Mills' Dividends

New Bedford, Mass. — Dividends paid out by New Bedford mill corporations in the fourth quarter of 1930 totalled \$166,022, figuring an average of 46 cents per share on an invested capital of \$43,322,181. The amount distributed for the year was \$768,590, an average of \$1.78, compared with a total of \$1,069,790 paid out on a capital of \$50,741,973 in 1929, or an average of \$2.11 per share.

In addition, a number of corporations in process of liquidation distributed a total of \$1,169,100, this amount going to stockholders in Acushnet, City, Manomet and Nonquitt. Including Taber Mill preferred stock, 12 stocks made yields for shareholders, these being Beacon common and preferred, Dartmouth common and preferred, Gosnold preferred, Hathaway, Kilburn, Neild, Pierce, Quissett, Soule and Taber.

In the process of liquidation, Acushnet distributed in all, the sum of \$704,000, or \$44 per share. City paid \$187,500, or \$25 per share. Manomet paid a final liquidating dividend of 47 cents totaling \$37,600, and Nonquitt paid out \$240,000, representing \$5 per share on the original investment.

The respective amounts paid during the year, along with the total rate follow:

Corporation	Capital	Total Rate	Am't.
Beacon com.	\$1,200,000	6	\$72,000
Beacon pfd.	1,216,500	6	72,990
Dartmouth com.	2,400,000	5	120,000
Dartmouth pfd.	200,000	5	10,000
Gosnold pfd.	825,000	6	49,500
Hathaway	1,600,000	3	48,000
Kilburn	2,250,000	3	67,500
Neild	1,200,000	5	60,000
Pierce Mfg. Co.	600,000	12	72,000
Quissett	2,000,000	5	100,000
Soule	1,250,000	6	75,000
Taber pfd.	400,000	5 1/4	21,000
	\$15,151,500		\$768,590

245 Garments of Silk

Antofagasta, Chile. — When two passengers walked ashore from the steamer Orazio in heavy wraps despite a blazing sun, suspicious customs guards examined them and found 245 separate silk garments on their persons. It took them half an hour to disrobe and they were held on charges of attempting to smuggle in goods valued at \$60,000.

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SOUTHERN RAILWAY SYSTEM

HOME SECTION

Edited by Mrs. Ethel Thomas—"Aunt Becky."

Among the Mills—Gastonia, N. C.

Gaston County has reason to be proud of the many modern textile plants that nestle picturesquely on hill and dale in every direction, giving honest work and open opportunities to those within her borders.

True, during the past year, most of these mills have gone in for their share of hard knocks and curtailment, but there's always a silver lining to every cloud; increased leisure has given more time for play, and, the majority of people have profited by it in more ways than they realize.

Many people—not only in Southern mill villages, but all over the world, are learning as never before, how to spend wisely. Many, who for years were slaves to debt, have gone on a strictly cash basis, and are saving money by so doing. Many have stopped so much dope-eating, and "between-meal eating" and have profited wonderfully in better health.

Mill people who have been loyal and faithful, have not been allowed to suffer. We know one mill in Gastonia that has gone through terrible trials, but, during forced curtailment, contributes handsomely each month, and every official, superintendent and overseer in the same mill contributes one-tenth of his salary toward doing for the unemployed of the village; and, no doubt there are other mills doing as much.

Even the poorest operative is in better circumstances than those deluded souls in Danville, Va., who for nearly six months have been on charity or at the mercy of the man that got them into such a mess.

SMYRE MILL COMMUNITY

It was our delighted privilege to attend a meeting of the Woman's Club and Missionary Society combined, of Smyre Mills, in the brand new and lovely community building, Tuesday night of last week. Sixty-two ladies came for business and pleasure.

Twenty-one ladies from Ranlo community, lead by the charming Mrs. John A. McFalls, were guests of Smyre Mills Tuesday night and we have never seen a crowd of school girls more full of pep and frolic, than those twenty-two ladies. They will *never* grow old.

There's a fine library in this community building, and it is increasingly popular.

Mrs. Lanier, who for many years has been with Smyre Mills as community worker, has resigned, much to the regret of her many friends. But in honor to her, the ladies will endeavor to carry on as she would wish, and, Mrs. Marshall Dilling at the helm, and everyone cooperating, they will accomplish great things.

BOY SCOUTS HAVE BAND

There's a happy looking crowd of boys in Smyre, for the Boy Scouts have organized a band, and Mr. Dilling, the superintendent, says that "You'd be surprised to hear what they can do." When they get too noisy at home, their mothers can escape to the Community House and listen, and everybody is happy.

MODENA PLANT, RANLO MFG. CO.

This mill is making improvements and changes. Some machinery is being overhauled and some discarded for new. Four latest model Foster winders have been installed, and everything getting ready for real business. W. T. Story is the genial superintendent; W. P. Carrigan, carder, and E. E. Smith, jolly as he can be, is spinner.

GROVE MILLS, INC.

The management here is taking advantage of part-time, to overhaul machinery, and is dividing the work among operatives. This is a splendid arrangement and much appreciated by the operatives. W. C. Withers is superintendent, with L. T. Heavener, overseer carding No. 1 and J. C. Price, overseer spinning No. 1. Mr. Ward is carder, and Mr. Jenkins, spinner in No. 2. These mills are exceptionally nice and clean, and so are the operatives.

FLINT MFG. CO.

Here again, we find really attractive mills, especially No. 2, which is almost entirely of glass, and fireproof material. C. L. Lytton, superintendent, has been on the job for around 14 years, and is a live wire if there ever was one.

He has invented a clean-off contraption that is a wonder in simplicity and effectiveness. It looks like a woman's hat box, with a few little overhead additions and can run so economically that it will no doubt have a big future. And yes sir, its patented—and a good thing it is.

Those who wish to see an almost perfect cotton mill, from the point of furnishing and sanitation should visit Flint No. 2—the new mill.

In mill No. 1, C. W. Cloniger is day carder, and T. A. Smith, spinner; at night, Will Grant, carder, and C. W. Cash, spinner and twister.

In No. 2, F. G. Withers is day carder and Wade Starnes, spinner. At night, Lee Baker is carder, and F. G. Kinley, spinner. T. L. Lytton is night superintendent.

MANVILLE JENCKES—LORAY PLANT

There are many empty houses in this village, but the people who remain here, are of the best, and all devoted to the agent, Mr. John A. Baugh, as we knew they would be. We have known Mr. Baugh for many years, and there is no one more fair and square than he.

Loray has four churches, and Loray Baptist Church has the largest Men's Bible Class that we have ever seen in a mill village. We saw a picture of this class containing 516 fine looking men.

The M. E. Church has an extra large class of men, with nearly 200 on roll. The Wesleyan Methodist and Presbyterian churches are very progressive also.

The pastors are: Baptist, Rev. J. W. Whitley; Methodist, Rev. R. A. Taylor; Presbyterian, Rev. R. J. Hunter; Wesleyan Methodist, C. K. Gentry.

MEN IN THE MILL

O. G. Morehead is superintendent of preparation, with R. L. Hulsey, overseer carding, and C. L. Jolly, overseer spinning, spooling and warping; S. C. Davis, superintendent twisting and reeling; J. W. Hare, overseer twisting; M. D. Carver, overseer reeling.

Somehow, we failed to get the weave department; but E. M. Pace is overseer cloth room, and L. M. Sossomon, master mechanic.

At a cafe in Loray, we heard operatives discussing and "cussing" the union, and if an organizer should venture there, he'd no doubt make a very hurried exit.

Chadwick-Hoskins Dinner

Charlotte, N. C.—The officials of the Chadwick-Hoskins Corporation, operating a number of textile manufacturing plants, were hosts Saturday evening, January 3, when the superintendents, department heads and lesser executives were entertained by approximately 200 persons in the banquet hall of the Charlotte Chamber of Commerce. The program included several brief addresses and musical numbers. B. B. Gossett is head of the chain of textile manufacturing plants.

Gastonia, N. C.—Parkdale Mills, Inc.

This little mill makes No. 20 to 80 yarns, and is one of the nicest in the county. The superintendent, M. R. Adams, is a young man and single, in spite of every art of Cupid. But next year is leap-year, and the girls are plotting a strong campaign—and we'll see what happens.

D. C. Dellinger, day carder, and G. T. Penland, day spinner, have been on the job for quite awhile, which speaks well for their ability. T. L. Crowe is night carder, and A. J. Redmond, night spinner. G. A. Kinlaw is master mechanic.

Ranlo, N. C.—Priscilla Mills, Inc.

This pretty mill with Spencer Mountain as a background, attracts the admiration of all who see it. The building is modern in every respect, and furnished with the best of machinery. Sewing thread and hosiery yarns are made, and the product is absolutely without a flaw. Everything neat and clean.

Gordon A. Johnstone, manager, is one of the finest textile men in the South, and is making an enviable record at Priscilla, where he has the respect and confidence of every operative. Not only in the mill, but in social and religious life, Mr. Johnstone is very much interested, and is always ready to lead or help in any worthy cause.

We have misplaced our notes, and do not remember the names of overseers, but Mr. Johnstone's son, Amos, is on the job with his father, and is a very pleasant young man.

Miss Hester, charming daughter of Mr. Johnstone has an executive position with Ayers Advertising Agency in New York, having charge of music in broadcasting.

Goldville, S. C.

During the past year quite a few employees have started savings accounts through weekly payroll payments. Some have saved for a special purpose and some have allowed the money to accumulate.

The real purpose of saving is to build up a reserve

for emergency and a nest egg toward independence. This can be done by almost any Joanna employee who is determined to get something ahead.

We are enjoying good wages and regular work in Goldville despite the hard times existing everywhere. It is the desire of the mill to encourage the tendency to thrift that has been shown during the past year by paying interest on deposits which are allowed to remain.

Rockingham, N. C.—Entwistle Officials and Overseers Entertained by Superintendent

Mr. A. B. Brannon, general superintendent of Entwistle Manufacturing Company, Rockingham, N. C., entertained his overseers and other prominent mill men of the city at a New Year's dinner, December 31st. The home was decorated in beautiful cut flowers, and an elegant turkey dinner was served by Mrs. Brannon and her sister, Mrs. M. P. Ramsey of Gaffney, S. C.

The following were present: G. M. Bowes, secretary Entwistle Mfg. Co.; M. T. Hinson, shipping clerk Entwistle No. 2; J. W. Jenkins, general superintendent Hannah Pickett No. 1 and 2; George P. Entwistle, treasurer Entwistle Mfg. Co.; T. E. Davis, manager Entwistle and Pee Dee stores; G. B. Byrd, superintendent Pee Dee No. 1; H. C. Gibson, paymaster Entwistle Mfg. Co.; H. D. Steadman, secretary and treasurer Midway Mills; William H. Entwistle, general manager Entwistle Mfg. Co. and Pee Dee Mills; W. B. Cole, president Hannah Pickett Mills; J. C. Stubbs, superintendent Pee Dee No. 2; J. M. Currie, assistant superintendent Entwistle No. 2; Charles Jones, overseer carding Entwistle No. 2; C. J. Waldrip, overseer weaving, beaming and warping Entwistle No. 2; P. L. Dawkins, overseer spinning and spooling Entwistle No. 2; J. R. Ephland, overseer cloth room Entwistle No. 2; J. C. McNeil, dyer Entwistle No. 2; C. G. Williams, master mechanic No. 2; C. I. Wrape, overseer carding No. 1; W. C. Rowland, weaver Mill No. 1; W. F. Ivey, assistant superintendent and spinner Entwistle No. 1; John Gay, master mechanic Mill No. 1; L. E. Hollar, cloth room overseer Mill No. 1.

After dinner, the guests enjoyed cards and smokes and at the approach of midnight the guests wished the host and each other a Happy and Prosperous New Year.

Broadcast.

In Appreciation

We wish to sincerely thank the good people of Thrift, for their sympathy and help during the illness of our mother, and especially for the comfort of their wonderful friendship through the trial hour of death of our mother, Mrs. M. J. Wiley-Helms, which occurred Tuesday, January 6th, 1931.

Words can never express our heart felt appreciation for the unfailing kindness of our community nurse, Miss Nellie Hall, and our dear neighbor, Mrs. Lawrence Goodman. The Woman's Club, in fact everybody in the community—even the mill officials, were unfailing in that true and sympathetic Christian spirit, that is so comforting to those who are in trouble.

To each and everyone, we extend our grateful thanks.

Mr. and Mrs. E. E. Wiley,

Kendall Mfg. Co. (Thrift Plant), Paw Creek, N. C.

"Listen! Lend me twenty cents, but only give me ten of it. Then as I owe you ten and you owe me ten, we'll call it square."